THE

AMERICAN FARMER,

AND

SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . *Virg.*

Vol. III. **BALTIMORE, APRIL, 1848.** **No. 10.**

WORK FOR APRIL.

As this is the month when every farmer and planter should put forth all his energies of mind and body, to carry into successful execution his plans of operation for the season, we consider it opportune to the occasion to remind one and all, of those duties which demand immediate attention. Even the most circumspect and systematic may sometimes profit by a hint, and be impelled onward to the discharge of an important duty, which but for it might have escaped their notice. And as such is the case we will venture to lay down, in brief, a few of the things which can be advantageously done during the present month, and while we are doing so, it may not be out of place to remark, that success in all agricultural operations essentially depends upon doing whatever may be done, well; that the growth of a crop is greatly affected by the manner in which the soil may be prepared for its reception.

With these brief remarks we shall proceed to such things as should be forthwith done

ON THE FARM.

Lucerne.—Those who desire to make an experiment of this productive grass, should try an acre during this month. The soil in which it most delights, is a *deep fertile sandy loam*, which should also be well manured. The best way to cultivate it, is in drills; but if the ground be *ploughed twice*, *subsoiled deeply*, and manured after the first ploughing, it may be grown advantageously by *broadcast* culture. The soil must be thoroughly harrowed, so as to bring it into *fine tilth*—the seed to be lightly harrowed in—if lime be not present in the soil, 10 bushels of lime, per acre, should be sown on the land. 15 lbs. of seed, per acre, when drilled, and 20 when sown broadcast, are the quantities. In fertile loamy land, well manured, Lucerne may be cut from three to four times in a season, it is one of the most nourishing grasses grown, and is relished by all kinds of stock. As a *soiling grass*, it has no equal, being the earliest in spring, and latest in the fall—it promotes the secretion of milk, and imparts a rich and delicate flavor to butter. As a dairy grass, it stands peerless and alone, o'er-topping all other grasses full a head and shoulders.

Oats.—Wherever this crop may not have been gotten in last month, all possible exertions should be made to sow them as early this month as possible, as early sowing always promotes the yield of the grain. This truth may be relied upon, that a large product cannot be expected from poor land. He that commits his oat-seed to such land, with such hope, will be disappointed; he, however, may improve his chances of success, by sowing over every acre of his field a bushel of plaster, 5 bushels of ashes, or lime, well mixed together.

The land should be well prepared, by faithful ploughing, harrowing, and rolling. Whether the oats be ploughed or harrowed in, the earth should be compressed by a heavy roller, in order to bring it into immediate contact with the seed, to promote germination, and give stability to the roots of the plants. The seed too, would be the better of being soaked in salt brine of strength to bear an egg, and dried in a mixture made of equal quantities of ashes and plaster. Great benefit would result to the crop of oats from sowing 2 bushels of salt per acre over the field. The salt would act in a three-fold way—it would kill the grubs—convert them into food for the plants, and attract moisture from the atmosphere. Less than 2 bushels of seed, per acre, should not be sown.

If the ground be in a state of fertility, *Clover* seed may be sown upon the oats, at the rate of 12 lbs. per acre, to be lightly harrowed in, and finished by rolling.

Care should be observed in the selection of the oats for seed; the better the seed the better will the crop prove.

Barley.—This grain should be sown early this month, at the rate of 2 bushels per acre. It delights in a good fertile loamy soil. Grass seeds may be sown with it. If *Clover*, 12 lbs. per acre—if *timothy*, 1 peck of seed per acre—if *Orchard Grass*, 2 bushels per acre.

Spring Wheat.—This grain may still be sown, but the earlier the better. It requires, like winter wheat, a good soil, and like it, should be steeped in salt brine, and dried in lime, as it is particularly subject to the smut. From our experience in its growth, we look upon it, this side of the Delaware, as a very uncertain crop. We have grown 22 bushels to the acre, and we have obtained only 7; so that we have ceased long since to sanction its being sown except in cases of necessity—where the winter sown wheat may have failed, it may be resorted to, as was Hobson's choice in the case of the horse—not otherwise, in the regions hereabouts.—All lands in which the cereal grains are raised,

should have lime and potash in them—and where they may not be naturally present, they should be artificially applied.

Meadows.—Meadows that are hide-bound, may be greatly improved by having the harrow passed over them, and 5 bushels of ashes per acre sown thereon and rolled.

Permanent Pastures.—Both the quality and quantity of the grasses on permanent pastures, may be greatly improved, by submitting such pastures to similar treatment as that recommended for meadows.

Fences.—As nothing is more vexatious than bad fences—as nothing is more apt than such fences to lead to difficulties between neighbors—we would recommend you, if you have not already done so, to make a thorough examination of every pannel of fence on your farm, and have all repairs made that may be required, without further delay.

Brambles, Briars and Bushes.—While repairing your fences, take care to have every bramble, briar and bush cut up, so that they may no longer remain to excite the insidious remarks of the traveller, who is too prone to speak disparagingly of the farmer who permits his fences to be lined with all sorts of bushes and briars. As you cut them down, put them in pile, and when sufficiently dry, burn them—or, if you have gullies, have them placed there to arrest the further washings of the rains.

Hauling-out Manure.—Let nothing prevent your attention to this duty—the job is a heavy one, and the sooner completed, the sooner will your mind be relieved, and you able to direct your attention to something else of importance. Your manure once in place, you will feel imbued with new spirit—armed with renewed energy. While preparing to haul it out, if you will mix a bushel of plaster with every 20 double-horse cart loads of it, you will greatly increase the value of your manure for present as well as future purposes.

Hemp and Flax.—It is full time that these crops were gotten in.

Tobacco Beds.—If the plants in your tobacco beds be attacked with the fly, or manifest a sickly hue, try the efficacy of a solution of soot and sulphur in a bag, place it in a barrel or tub, pour boiling water over it, and when cool, water with the solution. 1 lb. of sulphur to a quart of soot and 2 gallons of water—this will bear being filled up several times.

Planting and Culture of Corn.—We shall endeavor to lay down a few practical rules upon this subject, and then leave it to the good sense of the planter to adopt or modify them as to him may seem best In a matter where so much diversity of opinion exists—upon a question, where every neighborhood has its own peculiar way of cultivating this great crop—it would be presumptuous in any single individual to attempt to assume that *his* is the best method; we shall, therefore, keep so far on the side of delicacy, as to advance what we may say upon the subject, as mere *suggestions*, which may be safely relied upon by the *novitiate* in growing corn, followed by the experienced, or improved upon, as in their discretion and judgment they may deem fit and proper.

With this brief introduction, intended to relieve us from the imputation of presumption, we shall proceed to lay down such *rules* as in our poor judgment ought to be followed by those who desire to raise a large crop.

1. Manure the ground heavily with good strong barn-yard, or stable manure, say with 20 double horse cart loads per acre.

If the land may not have been recently limed, and the manure should be a *compost*, comprised of marsh mud, scrapings of the lanes, roads and yards, mould and leaves from the woods, from 10 to 25 bushels of lime should be thoroughly mixed with every 20 double horse cart loads of the mass; the more recently the lime may have been slacked, the better, in order that its action in neutralizing the acid of the ingredients should be the more prompt and effective.

If *Guano* should be the manure applied, and the soil be reduced in fertility, at least 400 lbs. of Guano per acre should be broadcasted, and ploughed in as spread.

Be the manure whatsoever it may, care should be taken to spread it *evenly*, so that inequality in production may be avoided; the manure, *as spread*, should be ploughed in, to prevent loss by the evaporation of its fertilizing gases. Wherever it may be found impossible to carry on the spreading of manure and the ploughing at the same time, a bushel of *plaster*, per acre, should be sown on the manure.

Judging from the quantity of already formed carbonate of ammonia, always to be met with in *Guano*, we believe that an enlightened economy would indicate, that *a bushel of plaster* should always be mixed with every 400 lbs. of Guano before it may be applied to the land, to arrest and fix the volatile gases which may be already formed, or forming under the operation of heat, moisture, and the voltaic action of the roots of the corn plants, and thus husband the nutrient portions of the Guano for the future use and nurture of the growing plants.

2. *Ploughing.*—Plough the ground truthfully and *deeply*, taking small slices, and leaving no balks, and laying the slices flat. Then pulverize thoroughly, by harrowing until a perfectly fine tilth shall have been obtained; when the ground should be rolled, in order that every clod may be broken, and the roots of the corn plants receive no impediment in their expansion and growth.

3. *Time of Ploughing.*—This must be regulated by the location and convenience of the planter. The absence of frost to indicate the proper time for ploughing.

4. *Necessity for Lime.*—If lime is not already present in the soil, it should receive a dressing—from 10 to 25 bushels per acre, will answer for the present, if it should not be convenient to the party to put more on *now*—he should, however, resolve not to be content until he shall have spread 100 bushels on each acre.

5. *Laying off the ground.*—As to *distance*, almost every neighborhood has its own.—and, therefore, we would remark, that if the ground be naturally fertile, or enriched by a *heavy* dressing of manure, good crops may be grown at 3 feet by 3 feet, or 4 by 3, or at farthest 4 by 4—the furrows to run north and south, that direction ensuring the greatest facility for the circulation of the air and the access of the sun. It should be the main object of every corn grower, to set a sufficient number of stalks on his ground to yield largely, which the *corn* will do, if the soil is in the right condition, and attention be paid to its culture.

6. *Preparation of the Seed.*—Soak the corn before planting, in a solution made in the proportion of 2 lbs. of saltpetre, ½ lb. flour of sulphur—the sulphur to be enclosed in a bag, and 10 gallons of hot water for 6 or 12 hours—then prepare a solution made with 1 *pint* of tar, and 2 gallons of boiling water, keep the tar stirred until dissolved, then drain the

corn and put it into the tar water, stir it round until it becomes entirely coated, when you must drain off the tar water, and *dry* the corn in a mixture made of equal parts of ashes and plaster. No more corn should be taken out of the salt-petre and sulphur soak than can be sown each day. No injury to its vegetative powers will occur for several days while it may be in that soak.

7. *Covering Compost.*—Make a compost in the following proportions to the acre—10 bushels of mould or rotten dung, 1 of plaster, and 5 of ashes, and place a handful of this mixture in every hill before covering up. It will promote the speedy germination of the seed, and give to the plants an early and vigorous growth, considerations of the first importance to success.

8. *Time of Planting.*—This must depend upon locality, and in this respect it may be safe to yield to the philosophy of the aboriginal rule, of *planting when the oaken leaf is the size of the squirrel's ear.* All that we have to say upon the subject, is—that early planting is always safest—that in case there should be a failure of plants from the ravages of the cut worm, or from any other cause, there is time left for replanting.

9. *Number of Grains to the hill.*—Plant 5 or 6 grains in the hill, so as to allow for the ravages of the cut worm, birds, &c.

10. *Thinning-out and first working.*—So soon as the corn plants are high enough to admit of it, thin them out, so as to stand 2 stalks in a hill. At the same time turn a furrow on either side from the hill, and leave it so two or three days.

11. *After Culture.*—In two or three days after you shall have thinned out and turned the furrows from your corn, go into it again with your plough, and turn back the furrows; throwing the soil as near to the plants as possible without burying them. *Hoemen* should follow the plough, so as to be ready to relieve any of the plants which may have been covered by the plough, and to cut up all grass and weeds which may be directly around the plants, and beyond the reach of the plough. These things can alone be done by the hand and hoe. At this working, the entire middles must be ploughed, but not sufficiently deep to bring up the manure. In a week or ten days from the time of this working, give another ploughing to your corn, giving the plants a *moderate* hilling. After this working, all further ploughing may be dispensed with—the *cultivator* should now be substituted for the plough; but, if necessary to the extermination of weeds and grass, the *hoe* must be brought into the aid of the cultivator, as from the first working of the corn, until it is laid by, neither weeds nor grass should be permitted to entrench upon the province of the corn-plants—they, and they alone, should be permitted to occupy the ground and drink of its salts and its nutriments.

We cannot impress this truth too forcibly upon the corn planter—that his success materially depends upon two things—*the keeping of the corn plants entirely free from the obtrusion of weeds and grass, and in the keeping the soil open, in order that it may freely drink in the dews and the rain, and be warmed by the rays of the sun.* Heat and moisture being essential to the nurture of the plants, as well as to the elaboration and perfection of the grain.

We are aware, that there are many highly intelligent corn growers, who entertain the opinion that the plough alone should be used in very stiff soils—there are much force and propriety in the reasons they assign in support of their opinion. But we are inclined to think, that, if the ground be well ploughed and thoroughly pulverized, as it should be, in the first instance, and a *heavy cultivator* be used, that it will keep the earth sufficiently open and answer as good, if not a better purpose than the plough.

If it should not be convenient to apply the compost named in the 7th rule, at the time of planting the corn, it may, with decided advantage, be done at the time of the first working. So satisfied are we of the efficacy of the "*covering compost,*" that we should rely upon its increasing the yield 20 per cent.—a matter of deep concern to all who grow corn.

Accumulation of Manure.—Sometimes while in conversation with farmers, we have urged upon them the propriety of covering their cow-yards with materials to absorb the liquid voidings of their cattle, and we have been met with the objection by such parties, that they had no such materials on their respective farms. In vain was it for us to point to their wood lands, for leaves and mould, to their branches, creeks and ditches, to their marshes, head lands, fence corners and fence sides, all of which contained the elements of fertility, if properly managed. That the proper materials were to be found in each and all of these places, was not denied; but then, there was the *labor* of gathering and hauling them, an objection insurmountable in the minds of all who are content to see their fields, once the abundant yielders of products annually become more and more impoverished. To contend against those who have but little energy, is a work as fruitless as was that of Sysiphus when he attempted to roll his ball up a hill; but with those who really have the *will*, the energy, and the enterprise, to undertake the task of improving their lands, each and all of these places will be looked upon as so many deposits, whence ample materials may be drawn to be converted into manure, and that by transferring those materials to their cattle-yards each fall, they may ensure full supplies of the most enriching fertilizers for all their purposes of row culture.

Now it so happens, that in England, even *Tenants*, by means of the *paring* plough, cut up and carry the *stubbles* into their stock-yards, and stables, every fall; use it as beds for such yards, and as litter for their stables; thus do they absorb and save all the urine made by their stock of all kinds, and by restoring these stubbles to their fields the ensuing spring, saturated as they are with the most enriching juices and salts, they vouchsafe to themselves large products, and to their lands the elements of continued fertility. By such means, aided by the use of lime, which he always buys, the English tenant farmer, is not only enabled to pay, in many instances, more annual rent than would buy out a *fee-simple estate* with us—but strange as it may seem to the proprietors of landed estates here—he gets rich, notwithstanding such outlays of labor in the procurement of the materials for making manure—notwithstanding such heavy disbursements for mineral manures, and for the payment of his rent.—*Long leases* enable him to make these efforts to fertilize his leasehold—*long leases* protect his possession, and his sagacity teaches him, that to ensure him remuneration for his expenditures, he must freely give of labor and manures to the lands under his culture—his reason teaches him, that everything which has life must be fed, and that crops, like men and beasts, require that the wear and tear of exertion must be replenished, periodically, or that exhaustion will supervene. Thus taught, he acts

up to the teachings of his reason, and, as a consequence, improves his pecuniary welfare. Such men, wisely regard the accumulation and proper appropriation of manure, as among the primary objects of farming—they regard labor thus bestowed, as the most productive on their farms, and hence it is, that they go on prospering and to prosper, adding yearly to the productive capacities of their lands; thereby demonstrating their true conception of the proper duties and true interests of the husbandman.

We have thus early called attention to the means of accumulating manures, in the hope, that it may inspire some enterprising farmer with the resolution of setting an example to his neighbors next fall.

Scare Crows.—A fifty acre field of corn may be protected from the crows, by suspending 4 bright sheets of tin on high poles, so fixed with wires as that the wind will cause them to undulate. The reflection caused by the waving of the bright surface of the tin, invariably drives off the crows; they probably mistaking it for the flash of gunpowder, a thing they have an innate dread of. We have tried other means, but none proved so effective as these.

Poultry Houses.—If not already done, these should be thoroughly cleaned out, nests and every other fixtures. That done, let them be whitewashed, inside and outside, not forgetting the roosts. For the management of the fowls, and the treatment of the young, we refer you to our more extended notice of last month, wherein we think you will find such instructions as will enable you to command success.

ROOT CULTURE.

As the pototo crop has so generally failed within the last few years—as the cause of the malady which has produced this failure, yet remains hidden from the ken of man—and the remedy is as far removed from us now as it was when the disease first made its appearance—prudence would seem to dictate, that the farmer should diversify his root-culture, in order that he may not have to rely upon a single root for his winter supply—and the more especially is this course enjoined upon him by the stern necessity of the case, arising out of the precarious nature of the degree of certainty which attaches to the culture of the potato—a root heretofore looked to by the husbandman as his winter vegetable reliance.

Independently, however, of the above considerations which point so unerringly—so forcibly—to the extension, as to families, of root-culture, there is another consideration, which presents itself to our mind with unmistakable signs of propriety, for the course we recommend. We desire to see every farmer paying more attention in providing *winter-food for his milch cows*—we desire to see those generous creatures so fed, as to place it beyond all doubt, that they will yield liberally to the milk pails, and enable the good house-wife, in winter as well as spring and summer, to have her dairy well supplied with rich butter and cream—a condition to which too many of them have long been strangers. And why? Why, simply, because their husbands have failed in their duty, to provide succulent food for their cows. *Dry Hay*, straw, and fodder, when fed *liberally*, will keep the animals in tolerable condition; but when fed *dry*, does not stimulate the milk vessels to the secretion of milk, and hence it is, that most farm cows, yield, in stinted measure, from the time that the pastures are frost killed in the fall, until they are warmed into verdure by the rays of the spring sun. Cows can be, and have been from the earliest period, subsisted upon such provender—but they deserve better treatment than is meted out to them through that system of feeding, which condemns them to dry food from December until May, year in and year out, and from which there is no escape, until consigned to the mercies of the butcher knife. In order, therefore, to bring about a better state of affairs in farm-economy, we here seize the occasion to urge upon every owner of a homestead, *to undertake the culture of an acre or two of* PARSNIPS, CARROTS and MANGEL WURTZEL. The same amount of labor that will secure a heavy crop of corn, will enable the grower to raise from 5 to 800 bushels of either of these roots to the acre—they require about the same quantity of manure, and it may be affirmed, with truth, that an acre of either can be raised as cheaply as can an acre of corn. Then, as such is the case, why should the husband, who loves his family, hesitate a moment in making up his mind as to the question of duty. No man who has a good wife—and if she be not good the fault is with himself, for all women are naturally kind, amiable, and confiding—no man who may have a family of daughters in whom his affections are bound up—but must feel his heart bound in joy at being able to gratify their ambition, and the more so, when that ambition prompts them to multiply the comforts of the household, at the same time they husband and promote a just and enlightened economy, and advance their parent's pecuniary welfare. Ah! but says the anti-rootist, "*I can't spare the manure from my corn crop! An acre of corn will yield more food for my cows than will an acre of roots!!*" We say he can spare the manure if he is so willed—if he has been as provident as he ought to have been in making it. And further, we ask, do the cows get any portion of the corn so prolifically grown on that notable acre? Let the milkless udders of these poor creatures answer our question, when, amidst snow and sleet, they may be shivering in some fence corner, and consuming their stinted allowances of straw and husks to keep themselves from freezing.

Having thus manifested our desire to see milch cows, in which the ladies of your family so justly take so much pride, better provided with winter food, let us talk a little about the kind of roots you should sow during the present month. First we have

Parsnips.—This is the root on which the farmers of the Island of Guernsey feed their Alderney cows, whose celebrity, as the yielders of rich milk and cream and delicious nutty flavored butter, are known the christian world over. That it is an excellent root for the winter feeding of cattle no one who ever ate of it, and noticed its sugary flavor, can doubt.

Soil.—The Parsnip delights most in *a deep light loam*, although it will grow in any loam.

Preparation of the Soil.—The ground would be the better of being *subsoiled;* but if that should be too much trouble, plough as deep as a strong team can sink your plough into the ground, harrow it well, then put on 15 double-horse cart loads of well rotted manure, and cross plough it in from 5 to 6 inches deep. Your ploughing being done, harrow well and roll. Your land is now fit for drilling in the seed, which can be done by a drilling-machine, so contrived as to make the drill, sow the seed, cover them, and roll at the same time.

If you have not a drilling machine, draw drills with the corner of a *hoe*, north and south, 2 inches deep, the drills to be 18 or 20 inches apart. We

have found a bottle convenient to sow with. We prepared the seed thus: We poured hot-water over them, and let them soak the over-night. In the morning we poured off the water, and mixed as much soot, plaster and ashes with the seed as separated them, we then mixed 2 parts sand with *one* of seed, put the whole in the bottle, which we kept well shaken as we sowed the seed from its mouth—we took pains to sow the seed as thinly as possible, and to sow over them a compost made of 6 parts mould, 1 part ashes, and 1 part plaster. This compost we sowed over them with a free hand, and covered with the rake, pressing the earth down with the back of the rake as the work progressed.

Age of the seed, and quantity per acre.—Parsnip seed if more than 1 year old is not certain of coming up. From 2 to 3 lbs. is the quantity per acre.

Culture.—When the plants are sufficiently high, to allow of it, they should be thinned out, so as to stand 4 inches asunder in the rows, be hand-weeded around the plants, and the ground stirred with the hoe, between the rows. In two weeks from this working, pass a cultivator through the middles, and use the hoe to remove all weeds and grass from around the plants. Repeat these workings twice more, and you may safely lay by your parsnip crop, with the well grounded hope, if you have manured and prepared your ground as we have directed, that you will gather in autumn, according to the season, from 500 to 1000 bushels of fine nutricious roots from an acre.

Carrots.—The soil, preparation of the soil, quality and quantity of manure, the same for carrots as for parsnips. The *preparation of the seed* is a little different—before putting them in the soak, they should be mixed with sand and rubbed between the hands—otherwise they are difficult to be sown with precision.

The *quantity* of *seed* per acre the same as for parsnips.

In *thinning* the plants, they should be so thinned as to stand 3 inches apart in the rows, which should be of the same width as for parsnips, and their mode of culture precisely the same.

Mangel Wurtzel.—This root should be managed like the two preceding ones,—it delights in the same kind of soil,—should have the same sort and quantity of manure. The rows should be *further apart*, say 27 inches, and the plants be thinned out to stand 12 inches from each other. The culture is the same, with this difference, that the plants show two crowns—one of which must be pinched off, or the roots will fork. In good deep loamy soil, well ploughed, and well tended, mangel-wurtzel is a most prolific root. From about August you may gather leaves from them to feed your milch cows, and repeat the gathering every 2 weeks, provided you leave the crown and upper series of leaves untouched. They conduce to the secretion of milk, increase its richness, and as a necessary consequence, increase the quantity of good rich finely flavored butter. *Three pounds of seed to be sown per acre.*

A peck of parsnips, carrots, or mangel wurtzel, cut into convenient size, and fed to each cow, night and morning through the winter, in addition to her usual quantity of hay or fodder, will keep her to her milk, and enable your excellent lady always to have good rich butter for the table or for market—a condition of things during winter which never fails to exact pleasurable emotions in the bosoms of those who take pride about the economy and comforts of the household.

Sugar Beets are cultivated precisely as are mangel Wurtzel, and answer every purpose of that excellent root, with this addition, the sugar beet is an excellent table vegetable, having much less of the flavor of the earth than the ordinary garden beets.

For *field culture* the *Altringham*, *Long Orange*, and *Belgium* or *White Carrots* are the best kinds—and of parsnips, the large Dutch.

As to the time of sowing.—So soon in this month as you can prepare your ground, by manuring and giving it two ploughings, thorough harrowings and rolling, is the time when you should sow your parsnip, carrot and beet seeds, though it will answer to do so up to the 10th of May—the earlier, however, you get them in this month, the better, as when got in early they yield the most.

Early Potatoes.—For the management of these, we refer to our remarks last month, and will dismiss the subject by the remark—that the early crop stands the best chance of escaping the rot.

Stock, of all kinds, should receive increased food and care—not omitting to give them salt at least thrice a week—or what is a very excellent substitute, a mixture of equal quantities of salt, slacked lime and ashes—a handful to each animal.

At this season of the year horses are the better of being bled and physicked. After bleeding, if each horse was to be given a pint of molasses, and a pint of fresh warm milk on a fasting stomach, and, in two hours thereafter, had ½ a pound of glauber salts, dissolved, administered to him, he would be greatly benefitted. After bleeding and physicking, he should be fed for a day or two on soft messes of bran, cut straw, and chopt food. After being given the salts, the horse should be kept gently moving until it operates.

Thus we close our memoranda of the labors on the farm, and will seize the occasion to say, that he who wishes to do justice to others, and have justice done to himself, must *personally oversee*, (though he may not help) every operation on his farm. Direct all, and be present to see that what he directs is faithfully executed—as the best security we have ever known to make one's hands industrious and careful, *is the presence of the master or employer*—such presence is a wonderful strengthener of the nerves and resolution of the employed—a most admirable antidote against that prevalent disease called *time-killing*.

MANURES.

To the Editor of the American Farmer.

I suggest the expediency of a monthly notice something like the following:

"CONCENTRATED MANURES—USE AND MODE OF APPLICATION."

LIME, ASHES, GUANO, PLASTER, POUDRETTE, } Under each head give precise instructions—1st. as to *quantity*—(specify the *least* and the greatest, &c.,) the degree of fertility and description of *soil* best suited. 2d. The different modes and the *best* of applying it to the land—whether by top-dressing, or ploughing in, (*how deep*,) or otherwise. 3d. Specify some of the staple crops—if *hill* or *row* culture, (as corn and potatoes)—give very particular instructions whether to be applied *in* or *on* the hill, or row, &c.

I would also venture to suggest another head of *periodical instruction*, which I think of sufficient importance to be noticed in every agricultural journal:

"*Composts*"—Uses and modes of application.

[State with precision the component parts of each sort—if stable or barn yard *manure* be the bases,—give the number of cart loads, the number of soil, of lime, and of whatever else may be judiciously used—if either *lime*, *ashes*, *guano*, *soot*, *plaster*, *poudrette*, constitute the basis or primary element of another kind, the like particularity as to quantities or weight should be observed—if applied as a top-dressing to grain, or grass, or meadow—state the *quantity*, (bushels, or if cart loads, say two-horse,) per acre—mention the best season or time, &c.—if the compost be prepared for corn in the hill or for roots, the like information and particular instruction would be needed, &c. &c. R. J.

REPLIES

BY THE EDITOR OF THE AMERICAN FARMER.

Yielding to the request of our distinguished correspondent, we shall endeavor, as briefly as possible, to give our views upon the several manures to which he has called our attention.

1. *Lime.*—The virtues of this mineral as a manure have been so long experienced by the agricultural community, and so generally acknowledged, that it would be superfluous labor for us to attempt to enter into a minute detail of its chemical and mechanical action—for it acts both ways. It will make a tenacious clay soil *friable*, while its effect is opposite upon a sandy soil, as it gives to it more *tenacity*. *Lime*, like *ashes*, unless when used in compost, should always be spread upon the surface, after the land shall have been ploughed and harrowed. The philosophy of this is, that, by the force of its superior specific gravity, its tendency is to sink into the earth; and as it is an object that the whole body of the inverted soil should be benefitted, it should be applied on the top, in order that, as it descends, it may become diffused through the mass, and its action on the soil be general. A custom prevails in Chester county, Pa., of spreading it on meadows a year or so before breaking them up—a good practice we think. [See our last number, under the head of work for March.]

As to quantity per acre.—If land be *rich in vegetable matter*, a *hundred* bushels may very safely be applied to an acre. Any land covered with a good grass-sward might be given this quantity. Lands *moderately rich in vegetable matter* should not receive more than 50 bushels per acre—while to those which may have been exhausted, 25 bushels per acre will be enough—the doses to be repeated each time the land may be in corn, until 100 bushels shall have been applied. We would, however, impress this fact upon our readers, that all who put *lime* or *marl* upon their land, should always cultivate *clover* as one of their crops in the course of their rotations: clover-leys being absolutely necessary to furnish the material for the lime to act upon and to perfect the system of improvement through the agency of lime.

Lime is efficacious upon all descriptions of soils which are not naturally *wet* soils. In wet soils the lime forms an intractable mortar, and is of little or no benefit to the land. All such lands should, therefore, be *drained* before being limed or marled, otherwise expense and labor will have been expended without producing good results.

As to the *time* of applying lime, we would remark, that the natural time is that when the ground may be ploughed, whether that be in the fall or spring, unless, as is the custom in Chester county, when it may be spread on the meadow. In that case, we should prefer the fall, as it might have an opportunity of finding its way into the soil, and of preparing food for the grass at the earliest period of the succeeding spring—an office which it would be sure to perform.

2. *Ashes.*—This mineral, being composed of 54 per cent. of lime, besides several phosphates, exerts an influence very similar to it in the melioration of the soil, but is more extensive in the range of benefits. Like lime, ashes are suited to any soil which is *not wet*, and should be used in similar quantities upon similar descriptions of soil. It is good for all crops.

3. *Plaster.*—This mineral, composed of 46 parts of sulphuric acid, 33 lime, and 21 water, is the best of all manures to be applied to a crop of clover in *early spring*. As it takes 400 times its own weight of water to dissolve it, the earlier it is applied the better. It should, therefore, have the advantage of *all* the spring rains, in order that its chances of being dissolved may be the greater, its benefit depending upon its solution. The atmosphere, as well as rain water, contains, at all times, sensible portions of nitrogen. This substance, which, in fact, forms a large proportion of the aliment of plants, is absorbed by the plaster, being attracted to it by its sulphuric acid, which retains it in possession until compelled to part with it by succeeding rains, by which it is carried into the soil, where it furnishes food to the roots of the plants; and hence it is, that all clover fields which may have been plastered, show such manifest improvement after every rain, the plants having been bountifully fed by the descending nitrogen or ammonia. Plaster is said to exert the most benefit on sandy and loamy soils. We have used it on such with the best effects—so, also, have we used it on clover, growing on as intractable and stubborn a clay soil as ever taxed the patience and exhausted the strength of ploughman and horses—and on this latter soil it *increased* the product of the clover 100 per cent. by actual weight. But before we applied it—which was as early in the spring as the frost was out of the ground—we harrowed and re-harrowed the ground, so as to open it to the percolating operation of the rains. It is said that plaster does not act in the immediate vicinity of salt water rivers. Now we don't subscribe to this dogma—our belief is, that it will act beneficially any where, on any soil, *not wet*—and that its action will always prove most salutary where the land may have been previously limed. It may be, that there are some soils possessing a sufficiency of this mineral—on such soils it would prove inert; but the cause of its inactivity would not be referrible to the vicinity of salt water rivers, but because the soil had already enough of the mineral on it.

An opinion prevails to some extent, that plaster only acts beneficially on the broad-leaved plants, as corn, tobacco, clover, buckwheat, &c. In this opinion we do not coincide; but believe, that as a *husbander* of the nutrient principles both in the earth and in the atmosphere, it will exert a salutary influence on any crop; that it may be used with advantage in all composts wherein there is organic matter of any kind; and that, if a bushel of it were mixed with every twenty loads of farm manure, it would be the means of continuing its fertilizing effects far beyond the time such manure lasts without such admixture.

We are very certain that a compost formed of 1 bushel of plaster, 5 of ashes, and 10 of woods mould or well rotted manure, if applied to an acre of corn in the hill, would add 20 per cent. to its yield of grain.

There is another compost that we have used with

decided advantage, applied to corn *on* the hill. The quantities are for an acre of ground, to be applied in the proportion of a handful to each hill of corn at the first working. The compost was comprised of 1 bushel of plaster, 5 bushels of ashes, 1 bushel of salt, a double horse cart load of woods mould, and 20 gallons of urine: the whole well mixed together and applied as above stated.

For potatoes such a compost, in addition to the usual manures applied, we feel very certain would prove effective. We should sow it on the plants when they should first come up.

Plaster, when applied alone, is sown broadcast, at the rate of a bushel an acre—some farmers use two bushels, though we think one enough, unless where it may be used on an old field to induce the growth of vegetation for pasture. In that case, after giving such old fields thorough harrowings, we should sow two bushels, and add ten of lime or five of ashes. With such dressing, if the field be enclosed and the stock be kept out a year, we should rely upon having a good growth of white clover and various grasses.

4. *Guano.*—This manure has scarcely ever failed of producing a good crop whenever it has been fairly tried. *Four hundred pounds* to the acre will secure a heavy crop of wheat on poor land. It should always be ploughed in, say 6 inches deep, no matter to what crop it may be applied. Its nutritive salts being volatile, necessarily *ascends;* and to prevent loss by evaporation and escape from the soil, we would always combine a bushel of plaster with every 400 pounds of it. From the great strength of the carbonate of ammonia, which is ever present in it, guano should never be permitted to come in immediate contact with the seed sown, whether that be grain or root, as the ammonia is in so concentrated a form as to destroy their vegetative powers. When buried *beneath* them, this difficulty is not only obviated, but the property of lastingness is imparted to the mineral—a property which every economical farmer will know how to appreciate. *Guano* is too volatile to be applied alone as a top-dressing. If 400 lbs. of it were mixed thoroughly with a bushel of *plaster*, or with 20 bushels of pulverized *charcoal*, it might be so used, because, thus prepared, either the plaster or charcoal would hold the ammonia in reserve to be carried down into the earth by the rains, besides attracting other ammonia from the atmosphere, thus adding to the sources of the nutriment of the crop. *Guano* may be applied to any crop, or on any soil, where stable or other equally fertilizing manure would prove effective. It should never be used in direct combination with lime or ashes, as either of these minerals would drive off its already formed ammonia, and thus rob it of its active principle of nutrition. Either *lime* or *ashes* may be sown broadcast on the surface of the soil where guano may have been ploughed in, without any injurious effects resulting therefrom.

Where a soil may be *rich in organic matter*—vegetable remains—200 lbs. of guano will be sufficient for an acre, as on such land the phosphates comprised in the guano will be the most needed elements. In a soil *moderately* rich in such matter, 300 lbs. will be required; whereas, in exhausted soils, as we have before stated, 400 lbs. will be requisite.

Guano may be applied in solution, made of 1 lb. of guano and 10 gallons of water; but its utility and permanency would be greatly increased by adding to every pound of guano a ½ lb. of plaster. Its effects will be the more strikingly visible on recently ploughed or harrowed ground. Though we note this form of use, we do not recommend it, except where it may be necessary to stimulate growing plants on grounds poor in nutritive manures, as we believe an enlightened economy would always indicate that it should be ploughed under.

An opinion prevails to some extent, that guano is not applicable to *limed* lands. This is erroneous. For, although it would be injudicious, as we have before stated, to mix it *directly* with either lime or ashes, it will be found serviceable to apply it on all lands which may not have been recently dressed with these minerals—and that after being ploughed in, neither the one nor the other would operate disadvantageously if applied as a top-dressing. The calcareous matter, in either, as it should descend into the earth where the guano was resting, would hasten the elimination of its *volatile gases* somewhat, but we doubt whether its action would be seriously detrimental, as long before the carbonate of lime had reached that point it would have become too effete to drive them off much faster than they could be healthfully taken up by the roots of the growing plants. And we are very certain, that where the guano may be mixed with plaster, that no harm whatsoever would be done, as the sulphuric acid of that mineral, in its natural affinities, would combine with the carbonate of ammonia and form a sulphate of ammonia, a substance not immediately, though ultimately, decomposible.

5. *Poudrette.*—This manure, if properly made, is a valuable one, its base being *privy* manure, so mixed in the manufacture as to be not only void of smell, but to have its volatile portions *fixed*. It may be used either as a top-dressing or be ploughed in. If we rightly understand its component parts, we would say, that it is adapted to the growth of any crop and would benefit any soil.

It is used in the quantity of a gill, to manure corn in the hill, with good effects. That quantity would no doubt give the plants an early start, but *more* would be much more effective. We should think that a pint to each hill would not prove an over-dose where the corn throughout its growth had to rely upon the poudrette for its nourishment. If *poudrette* be used as the exclusive manure of an acre of land, we should not rest satisfied under six barrels. And, by the bye, any farmer may make a very good substitute for *poudrette* by mixing

100 bushels of woods-mould,
200 gallons of human ordure,
1 bushel of salt,
10 lbs. of copperas,
5 bushels of ground bones, and
1 bushel of plaster, or 10 of charcoal

together thoroughly; suffer the mass to remain in pile two or three weeks, then spread the same on an acre of land and plough it in. The above proportions would serve to ensure a good crop of wheat on very ordinary land; and if clover be sown on the wheat, it may be calculated that it will carry the land healthfully through a four years course of rotation, and leave it in a greatly improved condition: and especially will this be the case if 25 or 50 bushels of lime be added to the acre while the land is in clover. By adding 10 bushels of lime and 5 of ashes to the above ingredients, one of the very best composts for an acre of turnips would be formed. Indeed, it would prove good for any crop, and on any soil. For thin sandy lands, its virtues would be enhanced by adding 10 double horse cart loads of clay to the mass—the effect of which would be to give tenacity to the soil, prevent loss by evaporation, and prolong the benefit to the land.

6. *Composts.*—In the composition of the following *composts* we presuppose that the lands are deficient in fertility, and that they are used with the double view of increasing the crop and improving the quality of the land:

COMPOST FOR AN ACRE TO BE SOWN IN WHEAT:

Take 20 double horse cart loads of woods-mould, the scrapings of roads, marsh mud, cleaning of ditches, &c.
25 bushels of lime,
5 bushels of bone dust,
5 bushels of ashes, and
2 bushels of plaster.
Shovel the whole until the several ingredients are thoroughly mixed; then make it up into a cone-like pile, so as to turn the rain; leave it three weeks, and re-shovel it, when it will be fit for use, and should be spread on the ground and ploughed in—the ground to be thoroughly pulverized by harrowing and rolling.

COMPOST FOR AN ACRE OF FAIR LAND TO BE PLANTED IN CORN.

Take 20 double horse cart loads of barn yard manure,
1 bushel of plaster,
2 bushels of salt, and
5 bushels of ashes.
Mix the whole well together, then spread it and plough it in, taking care to reduce the soil to fine tilth, as above directed.

COMPOST FOR AN ACRE OF SANDY LAND TO BE PLANTED IN CORN.

Take 10 double horse cart loads of barn yard manure,
10 do do virgin clay,
20 bushels of lime,
5 bushels of ashes, and
1 bushel of plaster of Paris.
Mix the whole, spread, plough, and pulverize, as above directed.

ANOTHER COMPOST FOR CORN.

Take 20 loads of peat,
10 do of barn yard manure,
25 bushels of lime, and
1 bushel of plaster,
To be mixed together as follows:

As each load of peat is spread out, sow 1½ bushels of lime thereon; then add half a load of the barn yard manure until the pile is completed. Let this remain two weeks, and then shovel the whole over; make the mass up into conical form and let it remain until wanted to be hauled out. This compost should be made in the fall. Twenty double horse cart loads is the proper quantity for an acre.

ANOTHER PEAT COMPOST FOR AN ACRE OF LAND.

Take 20 loads of peat and 10 loads of stable manure, and make it into compost as follows:

Spread 2 loads of peat on the ground, say four inches thick; spread thereon 1 load of stable dung, and so continue until the 20 loads of peat and 10 of stable dung have been spread out. On this spread as much earth as will form a cone-like pile, so as to keep out the water. This must be made in the fall and permitted to remain till spring, when, after being mixed with 10 bushels of lime and 1 bushel of plaster, it may be hauled out for use, and will be found to be an enriching manure. Double horse cart loads are here meant.

While on the subject of peat, it may be well to mention that one of the best uses which can be made of it, is to cover the cattle yard with it in early fall, and there let it undergo decomposition through the agency of the droppings and voidings of the stock until spring. It may, too, be used as bedding for the cattle and mixed with their manure from time to time though the winter.

COMPOST FOR AN ACRE OF TURNIPS.

Take 15 double horse cart loads of barn yard or stable manure,
10 bushels of ashes,
10 bushels of lime,
5 bushels of bone dust,
2 bushels of salt, and
1 bushel of plaster.
Mix the whole well together; shovel it up into pile, and after remaining ten days, shovel it over again, taking care to incorporate the several substances well together; put it up in pile again, and after letting it remain a week, it will be fit for use, when it should be spread on your turnip ground and ploughed in 6 inches deep. If possible, your turnip ground should be ploughed twice, once before the compost is applied, and thoroughly harrowed each time.

GENERAL COMPOST.

Take marsh mud, woodland mould and leaves, the scrapings of ditches, roads, lanes, yards, headlands and fence corners, weeds, corn stalks and marsh grass, and with every 20 loads mix 25 bushels of lime or ashes. Turn these over every few weeks and mix the mass with equal quantities of barn yard and stable manure; leave this when so mixed in pie for a week, and it will be equal to the very best stable manure. As you spread it on the ground to be ploughed in, sow at the rate of 1 bushel of plaster to the acre, and you may grow any thing with it, with the certainty of good crops and improvement to the land.

HOMESTEAD COMPOST.

Have 50 loads of earth of any kind (except sand) hauled and formed into a cone-like mound; pat the sides all round well: then form a basin on the top, throughout the whole extent of the mound, capable of holding liquids. Into this basin be careful to have all the *soap suds, dish water, washings of the hands and face, pot liquor and chamber ley*, as made, poured from time to time, and be as careful to have *plaster sprinkled over each emptying*—and in six months you will have as fine a body of manure for top-dressing or for ploughing in, as ever encouraged the growth of a luxuriant crop of wheat, corn, or other grain. Ten of these loads will be sufficient for an acre of land. Before being hauled out, it must, of course, be shoveled over well, to ensure equality of strength to the whole mass. One hundred loads a year may be made by a family of ten persons, the sole cost of which would be the labor of collecting and hauling the earth, that of forming it into mass and emptying the refuse liquids of the family into it. No danger of bad smell need be apprehended, as the plaster will render the fluids emptied into it inodorous.

To prevent deterioration by the rains, have the basin covered with boards, so as to turn the water on to the sides.

6. *Bone Dust.*—This is a most admirable manure. Indeed, composed, as it is, of 50 per cent. of the phosphate of lime, and 44 per cent. of gelatinous matter, which is easily decomposed in the soil and converted into manure, it could not fail to be of the very first importance. The phosphate of lime which it contains, renders it essential to all the grain and grass bearing families. That substance is found in small deposits in some limestone formations in New York, but is not present in the limestones of our country generally. Lime burnt from oyster shells

contains a very sensible trace of it; and hence it is, that we have always been partial to the latter description of lime for agricultural purposes, and have esteemed it, *pound* for *pound*, of more intrinsic value than the former.

From the very large per centum of cartilagenous matter contained in bone dust, it may be considered both a mineral and nutritive manure, and to comprise within itself much of what is necessary to impart fertility to the soil, and, consequently, to encourage the growth of plants. The *finer* bones are ground, the sooner do they yield up their fertilizing properties to the soil, and the greater the certainty of their ensuring an increased crop.

They may be used in drills or may be sown broadcast and ploughed in. When sown in drills, it is customary to compost 20 bushels of bone dust with 100 bushels of woods-mould and 5 bushels of ashes. Mix the whole thoroughly together; put it up in pie and let it remain some time to bring about incipient decomposition in the bone dust, which is generally effected in about three weeks. Before being drilled in, the mass should be thoroughly shoveled over, so as to render the admixture complete.

The above compost, in quantity and kind, is enough to spread over an acre, broadcast, and will increase the product of an acre of land from 25 to 50 per cent.—in some instances 100 per cent. The above compost is good for any soil and most kinds of crops that are grown.

Where it is important to produce the most *prompt* effect, it is desirable to reduce the bones, which can be done, by pouring over them half their weight of sulphuric acid, diluted with three or four parts of their weight of water and mixed with soil, as more particularly stated in our last month's number, under the head of "work for March."

If mixed, as advised, in *compost*, the bones is said to continue their action upon the soil much longer than when reduced by sulphuric acid. Prepared either way, however, their effect is most salutary and striking—so effective is their action, that even 10 bushels spread on an acre will tell in the most decisive manner, both in the quantity and quality of the products of the soil. That number of bushels of bone dust spread on an acre of meadow and rolled in, will change the very aspect of the grass and very sensibly improve its product.

As a manure for turnips, bone-dust has obtained a high reputation in England. *There* the turnip seed is drilled, and the bone dust sown on the seed in the drills—but *here*, where that root is grown broadcast, we should expect equal benefits, if the bone dust were to be sown broadcast and thoroughly harrowed in, prior to the seed being sown.

SOOT COMPOST AS A DRESSING FOR WHEAT.

Take 20 bushels of soot,
10 double horse cart loads of mould,
1 bushel of salt,
1 bushel of plaster, and
5 bushels of ashes.

Thoroughly mix the whole together, and after being in pie for a week, it will be fit for use. It should be spread and ploughed in 6 inches deep. The above quantity is enough for an acre in wheat, and, if the season prove favorable, will ensure a good crop.

From the official returns it appears there were imported into England from July, 1844, to July, 1845, 137,300 tons Guano.

For the American Farmer.

ON THE USE OF ASHES.

MR. EDITOR—Dear Sir:—As you have been so kindly disposed as to insert the few lines which I sent to you last month, I have taken the liberty to send you some experiments with leached ashes, which have been made by myself or come under my notice, in hopes that light may be deduced therefrom. As I am anxious that the experiments may be of the most possible benefit, I shall give time and place as well as persons connected with each experiment, that any person who wish may examine the lots for their own satisfaction and information. The first experiment which I shall describe was on a lot of 12 acres; the soil sandy with a very small mixture of clay; the subsoil gravel with a mixture of yellow sand and a small portion of clay, surface a little rolling.

On this lot, in 1816, my father, the late John Milburn, of St. Mary's county, Md., applied 3,000 bushels of ashes at the rate of 250 bushels per acre, (at which time five bushels of corn would have been an extra crop,) and sometime in April it was planted with corn, and though it was cut by frost in the fore part of June and suffered in common with other crops from the cool summer, it produced 17 or 18 bushels of good, hard, sound corn per acre, which would have sold for near twice the amount the ashes cost, to which ought to be credited a large portion of the crop, as the other part of the field which was near the same quality, did not produce two bushels of good corn per acre. From 1816 to about 1830 the lot was either in corn or small grain, being in corn every second year, and grazed as soon as the small grain crop was off until planted in corn the next year, and did not receive any kind of manure during these 14 years, except about 8 acres, which received a light scatter of farm yard manure on the corn hill one year. At that time, 1830, the 8 acres which had recived the light manure was re-ashed at the rate of 150 bushels per acre and planted in corn, with the balance of the lot, from which time it was cultivated in corn and small grain, (wheat and oats,) and sowed in clover in about equal turns, though not in regular rotation to the present time, and grazed when not in a cultivated crop without receiving any further application of manure, embracing a period of 32 years, in which time it was in corn 13 years, in wheat or oats 13 times, and laid over 6 years in clover, and at this time would produce three times the crop of the adjoining part of the field which has been enclosed with it, on which there has only been two crops of corn during the whole time; and as we are interested in ascertaining the loss or profits of this experiment for our present information, I shall proceed to give a tabular estimate of expenses and extra crops:

Lot 12 acres of Land,	Dr.	Contra,	Cr.
1816. To 3,000 bus. ashes, at 7 cents,	$210 00	By 13 crops extra growth of Corn, say 12 bushels per acre, 1862 bus. at 60 cts.	$1,129 20
1830. To 1200 bus. of ashes, at 7 cts.	84 00	By 13 crops Wheat and Oats, say 5 bus. per acre, 780 bus. at 80c	524 00
To barn yd. manure,	26 00		
	320 00		
Nett profit	1,333 20		
	1,653 20		$1,653 00

From the above statement there appears a profit of $1,333 20, besides the interest on the profits after the expenses were discharged, and the advanced value of the land, which is not less than $20 per acre, which added, would make near $1,600.

The second experiment which I shall notice was one by the same person and on the same farm, on a small lot of 1¼ acres; soil fine sand with a small mixture of clay subsoil; near the same it would have produced about 10 bushels of corn per acre. In 1827 there were applied 300 bushels of ashes per acre, and it was planted in tobacco, and sold the products in 1828 for 150 dollars, which account I shall state thus:

Lot 1 1-4 acres of Land,	Dr.	Contra,	Cr.
To 375 bushels ashes, at 7 cents,	$26 25	By sale of Tobacco,	$150 00
To cultivation, at $30 per acre,	37 50	By increase in value of land,	50 00
	63 75		$200 00
To nett profit,	136 25		
	200 00		

As I do not wish to trespass too much on your space, I shall not give any other experiment on this farm, though there were many made, and all proved profitable, and I have frequently heard my father say, that he had always had his capital with interest returned in a few years, and in every instance leaving the land twice as productive.

The third experiment to which I shall allude, was one by Maj. Jno. H. Milburn, of same county. In 1841 he applied ashes to the corn hill, at the rate of fifty bushels per acre to a crop of corn, and the adjoining part of the field he applied 100 bushels of shell lime, broad cast, per acre—the corn was best where the ashes were applied. In the fall he seeded the whole in wheat without any more manure. In 1842 there appeared to be no difference in the growth of the wheat. The weather for 10 or 12 days before harvest proved to be very warm, with frequent showers, and when the wheat was ripe the difference between the two portions could be seen several hundred yards. The part limed was dark with black rust; the part ashed was yellow or red, having the red rust; the grain tolerable, while the limed was very inferior, not worth more than half as much per acre.

During last year I was on his farm after he had taken the blades and tops from a lot of very good corn, and he called my attention to the difference in two parts of a lot of corn, and informed me it was in consequence of one application of different manures, some years since when he had the lot in tobacco. One part was dressed with barn yard and stable manure; the other with ashes—and he saw no difference in favor of the ashes the first or second crops, and the whole has been manured alike since, and he is of opinion that ashes is the most durable manure he has used.

Ashes have been used in large quantities in St. Mary's Co. for many years, and especially on and about the head of St. Mary's River, and have not failed to give large profits; and there is one farmer who has used them quite extensively for more than 30 years, who I have heard say, that he could borrow money and purchase ashes, and his creditor might sue him the next term of the county court, and before the money could be collected by the sheriff, say two years, he could clear enough to pay principal, interest, and costs. I would not wish it to be understood that I recommend farmers to be found too often either in court or banks.

I will conclude this paper by giving some of the experiments I have tried on Plum Point, head of St. Mary's River, St. Mary's county, Md. In 1837 I commenced to purchase ashes, and in 1839 I applied on 5 acres of land, which was in corn the year before, 200 bushels of ashes per acre; the soil a mixture of gravel, sand and red clay; subsoil red clay and gravel, which produced about 16 bushels of corn per acre, and planted it in tobacco, which account will stand thus:

Lot 5 acres of Land,	Dr.	Contra,	Cr.
To 1,000 bus. ashes, at 12½ cents,	$125 00	Proceeds of 6,500 lbs. of tobacco, sold in 1840,	$385 00
To cultivation, $30 per acre,	150 00		
	$275 00		
Nett profit	110 00		
	$385 00		

In 1840 I applied to a lot of 6 acres 1800 bushels of ashes; the soil near the same as before, the land had been in corn in 1838 and in oats in 1839; produced 15 bushels of corn and 20 bushels of oats, and the account is thus:

Lot 6 acres of Land,	Dr.	Contra,	Cr.
To 1800 bus. ashes, at 12½ cents,	$225 00	By sale of 9,000 wt. of tobacco in 1841, for	$359 00
To cultivation of 6 acres of tobacco, at $30 per acre,	180 00		
Nett profit	154 00		
	$559 00		

In 1841 I applied to a lot of 6 acres 1800 bushels of ashes; the soil much as before, but the soil very poor, except about one acre where there had stood an old house; the whole lot would not have grown more than fifty bushels of corn, and I planted it in tobacco, and the account is thus:

Lot of 6 acres of Land,	Dr.	Contra,	Cr.
To 1800 bus. ashes, at 12 1-2 cts.	$225 00	By proceeds of 8,500 lbs. of tobacco sold in 1842 for	$520 00
To cultivation 6 acres of land, at $30 per acre	180 00		
	405 00		
Nett profit	115 00		
	520 00		

I have applied ashes on over fifty acres of land, and find where I have spent the most capital I have received the best profits; and I have let my experiments range from 50 bushels to 700 bushels per acre, and for the information of you and your readers I will give the expenses and proceeds of one acre for a period of years. The soil was much such as described above and very poor in the beginning:

Lot 1 acre of Land,	Dr.	Contra,	Cr.
1839. To 200 bus. ashes at 12 1-2 cts.	$25 00	1839. By sale of tobac.	76 00
To cultivat'n in tobacco	30 00	1840. By sale of "	93 00
1840. To 300 bus. ashes at 12 1-2 cts.	37 50	1841. By sale of 10 bus. wheat, at 130 cts.	13 00
To cultivat'n in tobacco	30 00	1842. By 40 bus. corn, at 60 cts.	24 00
1841. To seed and cultivation in wheat	5 00	1843. By 40 bushels oats at 40 cts.	58 00
1842. To 100 bus. ashes	12 50	1844. By sale of tobacco	16 00
" To culti'n in corn	4 00	1845. By sale of 12 bus. wheat, at 100c.	12 00
1843. To seed and cultivation in oats	5 00	1846. By 40 bush. corn at 80 cts.	32 00
1844. To 100 bus. ashes	12 50	1847. By 16 bus. wheat at 140 cts.	22 40
" To cult. in tobacco	30 00		$346 40
1845. To seed and cult. in wheat	5 00		
1846. To 200 lb. Guano at 1,50	3 00		
To cultivation in corn	4 00		
1847. To seed and cultivation in wheat	6 00		
Nett profits	136 90		
	$346 40		

In the above estimate there is no estimate for straw or corn provender, as that was consumed on the farm, though it was not returned to the lot in

question, it having only received the manure charged —and if we add the increased value of the land which would not have sold for 10 dollars per acre, and in its present condition is worth 100 dollars per acre, as will appear from the above as well as in the next view I shall take of such land.

In September, 1846, I sowed a lot of 16 acres in wheat (which has received on its deficient portions from 250 to 700 bushels of ashes) with 25 bushels of wheat, which account stands thus:

Lot of 16 acres of Land,	Dr.	Contra,	Cr.
To 1400 lb. guano, at 2c.	28 00	By sale of 186 bus. wheat in Baltimore market	267 00
To 25 bus. seed wheat	25 00	By seed wheat sold and seeded 66 bus. at 144c	95 04
To seeding 16 acres "	24 00	By sale of 80 bus. wheat in Baltimore	100 00
To reaping 16 acres "	24 00		
To hauling in, thrashing and shipping wheat	24 00		
Nett profit	337 04		
	492 04		$462 04

The first lot sold may appear over the market price for new wheat last year, but if your readers will refer to a notice of the first lot of new wheat which reached the market on the 3d of July, for which 1,50 cts. was refused, which was sold the same day for that price, they will see that the amount is correct; though the wheat is of a very handsome variety and in fine condition, it would not have demanded over 1,25 cts. two days after. But so much for having one of Mr. E. Whitman's Railroad Horse Power Thrashers, with straw carrier and separator attached, which enabled me to thrash my wheat as soon as dry, as the little force required to attend the thrashing machine did not interfere with my harvesting, the whole being performed by 2 horses, 1 man who was not able to reap, 1 woman, and 2 boys not over 14 years old, sometimes thrashing and cleaning and carrying the wheat to the granary at the rate of 15 bushels per hour when running, thrashing and cleaning so well that it is not often you see a grain left. Before I had this machine, my poultry always injured my straw ricks by pulling them down after the waste grain, but since, they often examine it and as often decline to proceed, as they do not get paid for their labor, and strike for higher wages.

When I commenced writing I did not intend to say anything about labor-saving machines, but they are so much connected with high pressure farming, I find it difficult to write about one without saying something about the other, so you will please pardon me for this digression, as I always like to write and speak about things as they come to hand.

As I fear I shall trespass on the space that might be better occupied by some of your numerous correspondents, I shall reserve any further remarks that I may make for a future number; and I shall look to your editorials as well as correspondents for some light on the subject, as I hope that the subject will receive that attention which it demands. I hope that neither A Learner, Col. Capron, nor the Dutchman, will conclude that they have done enough; it is true they have done much in bringing the matter out, but such pens ought not to be laid aside, at least until the subject is thoroughly examined, not whether we shall improve our old fields, but the most profitable way that it may be done.

Yours respectfully,
R. N. MILBURN.

Baltimore, February 16, 1848.

A million and a quarter pounds sterling, or over $6,230,000, are spent by the British farmers for a manure, (Guano,) which was unknown in English farming five years previous to that time.

FARMING AND AGRICULTURAL EDUCATION.

To the Editor of the American Farmer.

Dear Sir:—As you and many of your intelligent correspondents have frequently, of late, noticed my efforts for the promotion of Agriculture, and my zeal in behalf of Agricultural Education, I beg leave to say a word to you and your readers in general upon my position, and the subject of training youth for the noble but much neglected profession of Agriculture.

When, some years ago, I quit the bustling scenes of business and city life, for the quiet and more respectable station of a farmer, or, if you please, country gentleman, I was ignorant in the main of the duties of the husbandman: so much so, that I was sadly imposed upon by some who sold me bad bargains, and misdirected by others, who led me into a bad practice in culture; besides, I was made to endure the exposure and vexation attending upon half work, indifferently performed by hirelings, who found they had a novice for their employer. The mortification, perplexity, and disappointments, that daily goaded me, were sufficient to drive me from the farm back to the city, in common with many, who had made their debut and retreat before me, to swell the cry of the dangers and difficulties of farming to all, but the stolid clodhopper sprouted to the soil. But the fear of being laughed at, or a spirit that would not permit me to look back, having once put my hand to the plow, staked me to the sod, determined, with the blessing of Providence, to overcome every difficulty, and to never quit the field till I was master of my new calling—master from the pig pen and dung heaps to the granary and corn crib —from the hen roost to the cow stable—from the potato patch to the green house: and whoever says now, I am not, let him come to Mount Airy, and see, whether I am not a Farmer!

It may be asked, how did I accomplish it: I answer, by several ways, but especially by reading, and working differently from the practice pursued by the jog-trot codgers, who have advanced so far as to discover the grist might as well be divided in the sack, to balance on the horse's back, as to put it all in one end and a stone in the other; but further than this, they go not.—These worthies may be found to this day, in some of the richest limestone valleys, applying, in quantity, hot, caustic lime upon their newly spread barn yard manure. In the absence of any positive rule or direct teaching, my observation of the untoward system followed in general by others, indicated the course I ought to pursue. This was the broadest and plainest leaf of the book, from which I learned, namely, to avoid the errors of the common practice.

When I came upon my farm, nearly one hundred acres, and at this time not one hundred and fifty, no common farmer could pay more than $250 per ann. rent for it. That was the rate a good farmer, so called, paid, complainingly: now it would be cheap at one thousand dollars a year, and were it the property of another, I could pay this rent on a lease for a term of years, keep my carriage, educate and support my family by the farm, in what I would call a genteel and comfortable style of living. This may appear apocryphal to some, but I could refer to many gentlemen who have visited me from time to time, who would readily admit its entire feasibility. To sum up, as the lawyers would say, it is only necessary to state, that on this farm, of not quite 150 acres, I

have kept, for years past, some forty to fifty head of fine cattle, during which time I filled barns with hay and grain, cribs with corn, cellars and pits with potatoes and other roots. In 1846 I mowed, of first crop hay, over 130 tons, reaped 500 bushels of grain, 400 bushels of oats, husked 800 bushels of shelled corn, gathered over 1000 bushels of choice, sound potatoes, and the usual large crop of other roots. Last year, a bad hay season, I mowed over 100 tons, harvested 800 bushels of grain, husked some 1,200 bushels of shelled corn, 1500 bushels of choice, sound potatoes, 500 bushels of carrots, 400 bushels of parsnips, and 1500 bushels of turnips; sold within the last two years over $1500 worth of cattle and swine, $1000 worth of butter, lard, &c.; have now on hand more than 30 head of superior cattle, and a large stock of the finest swine. There is now in the ground over 30 acres winter grain; I have hauled out, stacked on the field, barn yard manure, made on the place, sufficient to plant 6 acres of potatoes this spring, leaving more than enough, well rotted, for the gardens and the usual crops of carrots, &c., &c. —seldom apply any manure to the corn crop, and it is wholly out of the question to the oats, on my land. Now does not this appear almost impossible, if not incredible, on so small a farm? But it is susceptible of belief, when it is known that I soil the cattle during the months of May and June, which permits the cropping and mowing of nearly all the land—this, with the judicious application of the manure, and the doing every thing in *earnest*, and as it ought to be done, is the whole secret—there is no mystery in it. As old Nubley says—"Don't you see?"

To those who know me, it will not surprise, that finding the profession I had adopted beset with so many difficulties to the unenlightened, as I had to struggle with in the beginning, and which have deterred so many from entering upon so desirable a vocation, that I should take some pains to demonstrate its compatibility with good standing and respectable competency, and make an effort, even some sacrifice, to open a way by which enterprise and capital might confidently enter upon the business of farming, and successfully compete with professional or mercantile exertion for the meed of popular influence, substantial wealth, and exalted station, to say nothing of the serenity, health and happiness that would be theirs, of the rural scene, compared to the condition of those that toil in the noisome atmosphere of wharves and counting houses, courts of law, or hospitals.—How, then, was this to be brought about? Simply by educating or training for the Agricultural as well as for the other professions.—Why not? The one offers a better chance, ten to one, for the attainment of all that is good, great, or desirable, to any of the others, and this may be said understandingly. Well, but who would think of educating a genteel youth for a farmer?—"Aye, there's the rub!" Pray, then, lady mother and ambitious father, what mean you to do with your son after he has finished his education at college?—Make a merchant of him.—Why he can't begin to think of merchandizing. The classics, his notions, and habits, are all averse to the detail and speculation of trade. If, when at college, he could have had ships, merchandize, Change, Insurance companies and banks to handle and frequent, the young gentleman's capital and consequence might stand a short run, but it would be very brief indeed. Whatever his erudition might tell for him with the Literati, it would avail him nothing among the "bulls and bears" on Change, or the Percentums in the street. To make a sailor, you must bring him aboard through the hause hole, not through the cabin window—so of a merchant, he must begin at the beginning—peddle, if he is to be a Girard or an Astor. But to send him to college and expect him to thrive in trade—to delve successfully in "mammon's dirty mine," is a huge absurdity; and so would it measurably be the same, to think of throwing him on a farm without a previous training.

I do not mean, however, that a refined education unfits for the pursuits of agriculture in the same degree as it does for trade: by no means. The want of it in the farmer makes the boor; its absence in the merchant is seldom felt. Many opulent merchants have been known who could barely write their names, and yet, from mingling so much with the world, could bear themselves creditably along, even in the fashionable circles. Had these same gentlemen commenced their career as tillers of the soil, and through perseverance and industry had added field to field, till they became great land owners, they most likely, in the nature of things, would have lived and died clowns. Hence the necessity of giving farmers a liberal education.

But, suppose the learned professions be the aim of the fond parents—the law, for instance. Well then, the youth must undergo a sweating study in some attorney's office before he can be admitted to the bar; and how long must he contend against fearful rivalry and difficulties before he finds himself favored with a tolerable practice. But allow he at length becomes eminent and wealthy, what pains must be taken, what sacrifices must be made in health and constitution before he shall have found himself at the summit of the toilsome ascent?—to say nothing of the little time afforded him through his long and weary journey for the duties and enjoyments of the domestic hearth. Still more to be deprecated—the medical life.—How repugnant the lectures and the dissecting room, preparatory to becoming a licentiate; then the incessant rounds of visits to the chambers of the sick and dying; the calls, trenching, even upon repasts and ordinary repose, render the life of the physician less comfortable than the lawyer's.

There must be lawyers and doctors, I admit; but are there not too many already?—and is it not ill-judged in parents, to encourage their sons to enter upon professions, to whom nature, perhaps, has denied the aptitude and talent that give promise of success in a line where competition is so formidable. But, unfortunately, the calling of the lawyer and the doctor is held to be genteel, and that of the farmer vulgar; and this, it is to be feared, determines the choice of hundreds.—How irrational, how ill-advised, let the disappointed and broken-down practitioners themselves bear witness!

Impressed, by solemn reflections on this state of things, and impelled by a strong desire to do something towards elevating the character of the landed interest, I meditated a plan of instruction, by which respectable youths might obtain a liberal education, pending which, they would be imbued with a love of rural life, habits conservative of health and morals, and promotive of economy and industry. To effect this, I proposed last year, as you know, to establish an Agricultural College, at Mount Airy, provided a moiety of encouragement would be accorded by the public. The patronage required to justify the experiment was not yielded, and yet there were so many that applied, and so general seemed the regret when the project was abandoned, that I felt as though I had not done my whole duty in the premises, and

cast about in my mind how I might fulfil the expectations I had raised in the public, and acquit myself to my own satisfaction. Whilst in this mood, the friends of Mr. Wilkinson, Principal of the Dutchess (N. Y.) Agricultural Institute, backed by his own importunities, proposed that I should lease to him the homestead farm, and buildings requisite to his present class, and capable of accommodating as many students as I had intended providing for in the college, the system of training to be the same as contemplated by me. To this proposal I acceded, in the hope, that to the number of students Mr. Wilkinson could bring from the Dutchess Institute, would be added those that had previously applied for admission to the Mount Airy College, and thus realize my long cherished aspirations—I trust I shall not be disappointed.

Mr. Wilkinson is an excellent practical farmer, better grounded than I am in the principles, mechanism, and application of agricultural implements—is hopeful and devoted to his profession—excels in a happy disposition, by which he inspires his students to the most zealous exertion. From George W. Dobbin, Esq., of Baltimore, who lately paid me a visit, and who has a son at the Dutchess Institute, I learn that the principal teacher in Mr. Wilkinson's Institute is a gentleman of considerable merit and talent. With these advantages and my own humble efforts, under the favor of Him that sendeth the "early and the latter rain," I devoutly hope to witness, before I shall be called hence, the Mount Airy Agricultural Institute in the full tide of prosperity—sending forth graduates to be an ornament to their professions, and setting an example worthy of being followed by those who desire to live well and be happy.

May I not then, invoke the co-operation of enlightened and patriotic agriculturists, so far, as to use their influence, in their respective neighborhoods, with parents, to give the Mount Airy Agricultural Institute a trial. They should recollect they have as deep an interest in giving a proper direction to the rising generation as I can, or ought to have. If the plan of instruction proposed, coincides with their views, it is their bounden duty to give it a zealous support.

I beg to tender my respects and thanks to Mr. Tilghman, of Easton, for his suggestion as to the Macrophylla Rose being available for hedges. There are many of them in the gardens at Mount Airy. It is hardy and strong, but its flowers are too inviting for field hedges; near and around dwellings, it might be constructed into fence, and it would not only be useful, but highly ornamental. I often thought of combining the Macrophylla and Pyrus Japonica, continuously—hedge-like, in avenues or walks. In spring, the Japonica would be rich and glowing, to be succeeded by the Macrophylla, which keeps in flower through the summer and fall.

Very respectfully, your ob't serv't,
JAMES GOWEN.

Mount Airy, Philadelphia, March 11th, 1848.

For the American Farmer.

THE FEBRUARY NUMBER OF THE AMERICAN FARMER.

BY A PATUXENT PLANTER.

Potato Rot. FRUITFUL subject! All your contributors for January and February, seem upon this subject to come to the conclusion, (at least all who come upon the subject at all to any conclusion) that it is an epidemic for which no positive remedy has as yet been discovered; and that the *cause* is not known to a certainty; yet all seem to think that too much moisture has much to do with it. After all the theories, which are as various as the tongues of Babel, making "confusion worse confounded," I am still confirmed in my own views, published a year ago, and I am further confirmed in them by the sensible articles on this subject in your last few numbers. Physicians cannot agree as to the *cause* that exists, and *where* it exists, that produces *cholera*. But their sagacity, close observation, and science, have found out ameliorating preventives, and medicines that either palliate, or remove the disease when it makes its attack. Why should the agriculturist not do the same thing with this horrid disease that brings upon the human family so much want and misery? It is worse than cholera, for it is *contagious*; it is *infectious*, and is *hereditary*. It will have its day for a season, as a scourge, and then perhaps like *cholera* pass away for years. But, should we not do all we can to arrest it—to discover the cause, and at least ameliorate its terrific effects? Assuredly. Now the first thing to be done is to lay aside all that heap of learning and theoretical rodomontade, which *premiums* have elicited, and which in the end, (so far as *results* are to be looked to, after *practical* trials of said theories,) have turned out to be worthless.—Take the experience of those who *have suffered*, and have partially, if not *wholly*, escaped, by various remedies that they have tried. Where you find many concentrating upon one portion of treatment, set *it* down as so much gained, and go on in this way until you arrive at a general course which is likely to end in good. This has been my course, and I shall continue it—I find from *all* that I have *read*, and all I have learned from experience, based on *experiment*, that the following suggestions are valuable, because if strictly followed, they will ameliorate the disease always, and in *most* cases be a preventive.

1st. Plant none but *good*, perfectly sound seed.

2d. Plant deep, in light, dry soil.

3d. Plant early, and gather them before the *tops* or vines are entirely dead.

4th. Dig them only when the ground is dry, and dig a clear, dry day; house them before the sun be down or the dew falls. Put none away but such as look dry—house them in a dry cellar, letting fresh air to them whenever it is not too moist, or too frosty.

5th. Do not use *fermenting* manures in the trenches or hills.

6th. In putting them away make *three* classes.—Perfectly sound—Suspected—Partially affected.—From the *last* named, cut off with a knife every part at all affected.

7th. The *best* seed unquestionably are *Seedlings*.

Seeding Grass in August.—Mr. Noel is judicious in his general remarks about sowing grass seeds.—There is no better plan known to farmers than sowing oats with timothy when *it* is sown in August or September. I have succeeded in a good stand of timothy by sowing it with wheat as late as the 20th September, but we had a favorable autumn.

Save your Manure.—The changes cannot be too often rung upon those words, fellow-farmers! for manure is your all, it brings *change* I can tell ye. I was therefore pleased to read Mr. C. Coleman's excellent views on the subject of making and securing the stable and barn-yard manures, making thereby a good admixture of the two kinds, which is not as often attended to as should be done if we consult our interest.

Artificial Manure.—It is to be hoped that professor Liebig's method of making manure, that is intended to supercede Guano, bone-dust, lime, &c. may prove so, upon being tested by actual experiment, for a length of time, so that we may be convinced of its utility. Just now we want some antagonist to Guano, by which its price will be lowered—*surely* it should be sold for *less;* would not more money be made by the sellers, if it were sold for *less* per ton? This seems to be a general law of commerce and of political economy when applied to the *Custom House duties,* and to *postage;* why should it not be so with Guano? Suppose the merchants engaged in this traffic try it for a season?

How flattering to the hopes of the husbandman is the increased attention that our Legislature seems disposed to pay to his pursuit, as evinced in the proposition of Mr. Brady—it will, however, I fear, share the fate of Dr. Owings' resolution to subscribe to "The Farmers' Library"—which, by the way, could not be expected to pass a Maryland legislature, for a powerful reason, which need not here be given. Mr. Brady's views if carried out would be of vast importance to the whole people, but I fear it must "bide its time," which will be not until the agricultural interest, and feeling, and sentiments are *concentrated,* which alone can be done by *union* and *concert.* This union and concert can best be brought about by DISTRICT CLUBS, and the MARYLAND STATE CLUB!! No more important subject has ever been started in your very useful and popular journal—*None* are comparable with it in its vast importance to our people. And here let it be ascribed by my goose-quill,—not *gold pen,*—that this honor belongs to Dr. Wm. Brewer, of Montgomery county. His views are new, his plan is feasible, and if carried into effect, *will,* and must redound to his credit, and to the great increase of the wealth and prosperity of Maryland, for it cannot be denied that what elevates the agriculture of the State, must elevate the prosperity of the whole people, for Maryland is emphatically an agricultural State. It is true, Baltimore—great, glorious, beautiful city! pride and boast of our gallant little State! the very soul of Maryland! her great jewel, that every son so loves and cherishes! she whose expanding arms receives the productions of many of our western States, is a large component part of the State, and is engaged in commerce, and manufactures, and pursuits, other than agriculture; yet withdraw from her the tobacco trade—the wheat and the corn, wool, rye, oats, and hemp, iron, lead, coal and vegetables, pork, beef, &c., &c., which the people of her own State send to her, and she would become a city deserted. Her wealth, and commercial importance is felt in every part of the State, and every portion of the State contributes daily to the increase of her greatness and influence. Her prosperity is linked inseperably with the prosperity of the agriculture of the State. The agricultural interest is the *great* preponderating interest in the State, and one which for its own advancement must ever cherish the growth and prosperity of Baltimore; for *she* furnishes to a large extent a great *home market* for the productions of the country, in the centre of which she is enthroned like the ancient city of seven hills—and yet nine-tenths of our Legislation, of a general character, is done for the peculiar benefit of manufactures, canals, roads, harbors, and commerce, and other great sources of the prosperity of Baltimore as a city, while that interest on which she rests, and *must* mainly rest for permanent and substantial wealth and power, is neglected and left totally unaided and uncared for, except the benefit it derives incidentally from those public works just alluded to. Baltimore as the heart of Maryland, has these great arteries leading to and from her, bearing in strong currents her life's blood; and true, they pass throughout, in their various ramifications the entire body of the State; but if the body is feeble and weak, they are of little advantage; they take from the heart more blood than they return, and that must fail in time unless foreign aid be resorted to, and then the heart relies upon other sources than what its emaciated body supplies, which foreign aid if withdrawn by any means, it loses its own vitality, and *dissolution* is the consequence. This figure is used to illustrate the actual state of things as they now exist. Roads and canals have been made to bear along the teeming productions of the land to the great mart, Baltimore! while nothing has been done to increase those productions within our own State, and now our farmers have the *proud* satisfaction to see the floating barge sunk to the water's edge with the weight of western grain, tobacco and every variety of produce; and the snorting iron-horse seems to fret and puff the harder because of the increased burthens that are placed behind him by the prolific West, while he plunges through the barren, poverty-stricken fields of the Maryland farmer, who perhaps is at the very moment begging for a week's respite at the hands of the tax-gatherer, who sternly demands money to pay for those *grand* arteries that feed the heart, while they weaken the body—that render it too full with foreign food to be contained within what once was its slender ribs, or be supported longer on its spindle-shanks. This is true—*we feel it.*

How can our rights—our interests—be provided for except our wants are properly made known and pressed with zeal, and *demanded* by a voice which will command attention, and which will be effective? In the only way; the one suggested by Mr. Brewer. His plan is the only one we can adopt, fully to harmonize, to unite, and to make our great interest what it ought to be—the *first* in consideration in the Councils of the State—What a glorious sight for old Maryland, to see a Convention of Farmers, composed of some twenty gentlemen from each county in the State, representing the wealth—the industry—the morals—the talent of her people. Without any disrespect intended, I affirm such a Convention could be assembled yearly that could and *would* advance the cause of agriculture, swell the wealth of our people in the aggregate yearly, and thus do more to elevate the credit of our State than the yearly session of the Legislature can ever accomplish in the same period—Its *suggestions* upon the proper course of Legislative action in regard to *agriculture* and *labor* generally, would be tantamount to laws, for the voice of this convention would be the vox populi, and would control to that extent the Legislature on all subjects legitimately connected with agriculture. And where is there a man with *sense so little* who would not esteem it a higher honor to belong to this convention as a member, than to be a member of the House of Delegates, provided, I mean, that the said convention was formed of the two or three most eminent and popular farmers in each election district. Sir, such a convention would be worthy of old Maryland in her palmiest days—The acts and doings of this convention of 400 or 500 of the best Maryland farmers sitting for a week or ten days annually, would attract the attention and command the admiration of the whole agricultural

world. There is no doubt that the first session would increase the agricultural products one-third in the whole State. And it would go on to increase. We have the ability in soil, in the natural resources to be found in the State itself, in the industry of our people, in the latent *talent* of our citizens if it can be aroused, to make us one of the *richest*, most productive, and most beautiful countries in the whole constellation of free and independent nations. Our Chesapeake, Potomac, and other waters; our mines, our bottom lands, our high-lime-stone regions—our *people* themselves—our propinquity to the Atlantic—our climate—and last but not least, our *great city*—We have every thing that we can want to make us a rich State, an independent, happy, wealthy, educated and refined people. Only let the talent which has too long been buried by the inertness that has heretofore characterized those engaged in agricultural pursuits—let farmers and planters take the management, of public affairs and their own affairs too, and look into the details of a new system, as they would go over their store accounts, and let them exert their talents and energies in harmony and unite cheerfully in action, and you, sir, would be wonder-stricken at the healthful state of things that would soon be the result—The cold, callous, sheepish politician would stare, and the State would no longer be the field for avarice, sectional jealousy—envy and every other attribute of the demagogue—the aristocrat or the hired changeling to display their disgusting deformities, while the public weal was as a dead carcass over which these carrion crows were fighting.

And how easy will this plan be effected if farmers will but set themselves to work. I feel sure that the present spring, a District Club will be formed in every election District in Prince George's. Now let some friend of the cause but speak in like manner for each county, and see that the plan is carried into effect—It can and should be done. I trust that your able correspondent, Mr. Brewer, and other zealous contributors will continue to write upon this very important subject. Au revoir—

PATUXENT PLANTER.

THE PERIODICAL FAILURE OF FRUIT TREES.

To the Editor of the American Farmer.

Mr. Editor.—It has often puzzled me, being but little acquainted with Horticulture, and having no time to *study* it, to account for the failure of some fruit trees to bear every year. It once struck my mind that it was, in the case of the Apple Tree for instance, (which is the most important to be considered,) the want of underneath cultivation and trimming, that the trees felt; but this would not seem to be a satisfactory reason, when we consider that every other year these trees are found to bear *very full*, and their barren years, I have observed some that did not blossom at all, but would be *filled* with the most luxuriant foliage, considerably greater than that found on them when in full fruit. They sometimes, again, blossom quite fully their barren years, and bear a small portion of fruit. It appears certain, that the want of cultivation, such as horticulturists generally know how to apply, is not the cause of this periodical failure in the apple tree; if such was the case, the tiller of the tree would manage it so as to cause the tree to bear an average amount of fruit each year.

Neither does it appear that it proceeds from an exhaustion of the fruit-nourishing qualities in the tree, from its being over-burdened with fruit the preceding year; for if that was the case, it would be reasonable to look for a half, or at least, a quarter of crop of fruit the year succeeding the full bearing; and I have observed, as before remarked, that apple trees, especially, are found to produce a greater amount of thick and rich foliage when they have no fruit on them, than when they have. And as this is invariably found to be the case, it would seem as if the fruit nourishing qualities in the tree had gone into the foliage.

The cause of this periodical failure of fruit trees, generally, and apple trees in particular, and the method of so cultivating them as to cause them to bear *every year*, would be a piece of information which many of your readers would thank you for, if it be in your power to give, as would, especially,

Very truly, yours, &c.

B. E. S.

We have no knowledge either from practice or reading, which would enable us to answer the inquiries of our correspondent. We find the following brief article in the 2d vol. Agricultural Journal, which would seem to indicate that apple trees may be *educated* to bear well every year:

FRUIT TREES.

"Instead of continuing the old practice of having alternate bearing and barren years, for fruit trees, those who cultivate them would do well to note this fact. When young trees come into bearing for the first time, about the time the fruit is setting, if the most of it is taken off and this continue for a few years in succession leaving every year about the same quantity on the trees, they will by the time they have become of sufficient size to be profitable, acquire the habit of bearing every year."

Mr. Pell, of New York, claims to have made his apple trees bear annually, by laying the bark of the tree open with a sharp knife from the ground to the limbs, and by manuring and culture.

HARVESTING CLOVER SEED.

To the Editor of the American Farmer.

Mr. Editor:—You will confer a favor upon a young farmer, by giving in your next number, directions for saving clover seed. Is it the best practice to cut the clover, or save the heads alone by an instrument, *alluded* to in the books, as shaped like a comb, and dragged by a horse.—Please give full and precise directions, and say where such implement, if used, can be found.

What is the usual yield per acre, of clover seed.

Yours, respectfully,

Feb. 14, 1848. A Subscriber.

We have no experience in saving Clover Seed, and cannot, therefore, undertake to say which is the best method. The yield of clover seed per acre varies from 2½ to 4 bushels, and in extraordinary cases reaches as high as 6 bushels per acre. We know not where implements for harvesting the seed are to be seen.

☞We should be obliged to any of our readers possessing the sought for information to give us a communication upon the subject.—Ed. Am. Far.

All newly cleared good lands contain in themselves all those substances necessary for perfecting good and perfect crops of grain, grass, &c. From this fact newly cleared pastures are much better adapted for rearing cattle, sheep and horses, than old and long-grazed ones.

THE AMERICAN FARMER.

Is published the 1st of every month, at $1 per annum, or 6 copies for $5, by SAMUEL SANDS, 2 Jarvis' Building, North-st., Baltimore, Md.

☞ Advertisements inserted at the rate of $1 per square of 12 lines, for each insertion—large ones in proportion.

BALTIMORE: APRIL 1, 1848.

TO CORRESPONDENTS.

☞ "*Medley*," "*An Inquirer*," and "*The old man of the Mountain*," are received.

☞ "R. S. W." was received in good time, but its length precluded its insertion this month, in consequence of previous arrangements and engagements; this we regret the more, as we have seldom had a more ably written paper to present to our readers. It will appear in our next.

We have also received a reply from Jno. Jones, Esq., of Delaware, to the call of "Patuxent Planter," relative to sowing Wheat in July. We regret our inability to publish it this month—Also a paper from the same gentleman on Draining, and another on the "Intrinsic Value of Land."—Maj. Jones, in a note to us, alludes to a letter read by Judge Chambers some months ago to the Kent Co. Club, on the subject alluded to by Patuxent Planter. We would be highly gratified, as we have no doubt our readers generally would be, if the Judge would favor us with a copy for publication in our next Farmer.

We have received a very valuable communication from a correspondent in Beaufort, S. C., descriptive of a system of manuring, which the writer says has been useful to himself, and would no doubt be beneficial to others. We will, with great pleasure, give it a place in our next—although received early, yet our entire space was pre-occupied. We thank our South Carolina friend for making our journal the medium of communication.

Mr. GOWEN's communication, which we give in another part of this number, will no doubt be read with much interest. We hope that his most sanguine anticipations in regard to the Institute, for which he has made so great a sacrifice, may be fully realized

☞ PATUXENT PLANTER's suggestions, we hope, will meet with a response from every county in the State.

THE AMERICAN VETERENARIAN OR DISEASES OF ANIMALS.—*S. W. Cole*, Esquire, Editor of the Boston Cultivator, has published a work with the above title, which, after examanination, we feel bound in duty to recommend to our readers. The author treats the diseases to which animals are subject in a plain common sense way, so as to be understood by farmers generally; he gives the name of the several *diseases*, describes their *symptoms*, and prescribes the *remedies*, in so plain and comprehensive a way, that any man of ordinary intelligence may treat his own animals when diseased, with the certainty of curing them, if their cure be practicable. The object of the writer appears to have been to make himself understood,—a thing most lamentably neglected by many other writers,—and we take pleasure in saying, that he has been singularly successful, for he has eschewed all incomprehensible hard sounding terms, and brought his phrases down to the capacities of the unlearned as well as the learned. His book is practical, eminently suited to the wants of the agricultural community, and should be in the hands of every man who owns or rents a farm.

CORN AND OATS.—We have received from Mr. Jno. Randall, of Annapolis, a curiosity in the way of Corn. It is an ear which is perfect, with several smaller ones attached to it, similar to one noticed in our 1st. vol., p. 183, as left with us by Mr. Price, of Kent Co., Md.

Mr. R. has also sent us some samples of Oats, raised from seed from Connecticut. We will thank him to give us the promised account of the trial which he will make this year.

☞ Any one having an old almanac, (and there are those who preserve such things,) published in Frederick Co., Md., many years ago, by Col Sower, which every year contained the proper time for cutting brushwood, will confer a favor by sending it to this office.

WORTHY OF THE MAN.—In a letter from C. B. CALVERT, Esq., of Riversdale, in relation to his fine Durham Calves, recently so liberally offered to the public, he informs us that he has already delivered three, and has two others now ready for delivery, and that there are ten applicants so far, all of whom he excepts to supply soon. He says:

"If there should be any forfeits paid, I intend having them applied to purchase a premium for the best calf exhibited out of my lot; and if there should be no forfeits, I will purchase a premium myself, so that this premium, (which will probably be a very handsome one,) should be a stimulus to each recipient to endeavor to have the finest calf. I am in hopes it will be a very interesting part of our exhibition."

This is very liberal on the part of Mr. CALVERT—and is another evidence of the great interest felt by him in behalf of our Agricultural Society.—*Marlboro' Gazette.*

A new subscriber in Virginia, who ordered the "*Farmer*," commencing with the January No., writes us as follows:

"I have received the January and February Nos. of the Farmer, and must, in candor, say, that I have met with no work with which I am more pleased. You will please forward the Nos. from July last. I shall anxiously await their arrival. If you have any of the Mimosa Tree seed at this time for distribution, you will confer a great favor by sending me a few in a letter. If it is agreeable to you, I will from time to time write a *short article* on different farming subjects, the result of carefully managed experiments."

Our correspondent is informed that we have no more of the seed of the Mimosa. We have had so great a demand, that our supply is exhausted. We would be glad to hear from him upon subjects indicated in his note.

A NEW WORK ON GARDENING.

Mr. G. C. Riker, New York, has just published a very neat and interesting volume of 216 octavo pages, entitled "THE FAMILY KITCHEN GARDENER." It was prepared and edited by Mr. *Robert Buist*, of Philadelphia, author of *the American Flower Garden Directory*, Rose Manual &c.—a gentleman most favorably known to the Horticultural public as one of the most scientific florists and Nurserymen in our country. Than Mr. Buist, none are more eminently qualified by theory, as well as practice, to

fulfil the task of making a good book on gardening, or on any of the kindred subjects. From our knowledge of the attainments of the man, we took up his treatise with the highest anticipations of its merits,—and, after carefully perusing its every page, we are free to confess, that our expectations were more than realized. It is a reliable work—one upon which farmers and gardeners may fix their faith—one upon which the inexperienced may repose with entire confidence,—for, if its precepts and rules be followed, success cannot fail to crown their efforts.

The work contains *lists and descriptions of all the best varieties of fruits*, a thing of vast importance to those who may desire to set out orchards, but who do not know the character of the several kinds by name, as they will, by the information therein to be found, be enabled to make selections of the most choice descriptions.

The work also contains accurate descriptions of all the different species and varieties of culinary vegetables, with their *botanical*, *English*, *French* and *German* names, the best mode of cultivating them—and descriptions of garden implements, medicine and culinary herbs, together with the soils adapted to, and the best method of cultivating the various kinds of fruits. It is for sale by Cushing & Bro., and also at the Bookstore of the publisher of the Farmer.

THE WHEAT CROP IN CARROLL CO., MD., &c.—A correspondent in Carroll County, Md., writes us as follows:

"The prospect for a crop of Wheat is fair, though the late sown wheat has suffered considerable from the winter.

I am gratified to find the efforts you are making to place the "American Farmer" at the head of agricultural publications, and appreciated by an increased subscription list. With your present host of able contributors, it presents an array of original matter of the greatest variety and practical value. Hoping your efforts may be amply rewarded and that in a *solid* form, I am, &c."

A correspondent in Shepherdstown, Va., writing to us for some of the Minosa tree, remarks:

"I think with you, that a dwelling in the country without shade or ornament trees about it, says but little for the taste of the proprietor; and as I trust you will some day or other pay a visit to this part of Virginia, I would like you to see that I have not subscribed for your valuable paper in vain, nor disregarded your many interesting suggestions."

CAROLINE COUNTY, MD.—The following notice from the Denton Journal, recalls to our mind, the fact, that we have in that county but comparatively few subscribers to our journal.—Perhaps there is no other county in the state, where improvement is so much required as in Caroline, and we are surprised that the success which has attended the enlightened policy of their neighbors, has not stimulated her farmers to imitate their laudable example.—Surely, if they could be induced to read our journal for a little while, note the facts of what has been, and *how* it has been done, in other quarters not a whit better off than themselves, they could not but be aroused to exertion to rescue their county from its present depressed condition.—We hope some enterprising men will take the matter in hand, and aid us in disseminating among them the light of the experience of the many able practical contributors to our columns.

AMERICAN FARMER.—The February number of this excellent agricultural Journal has reached us. As usual it contains much valuable information for farmers and horticulturists. It should be taken by every farmer. If our farmers would more generally subscribe to such a paper, and follow the useful hints it contains, they would find it greatly to their pecuniary interest. Price only $1 per year.—*Denton Journal.*

Since the above was written we have received a letter from a gentleman in Denton, from which we take pleasure in making the following extract:—

"Caroline County though unblessed for the most part, with a fertile soil, lacks not "sons" followers of the plough, who are worthy in point of Agricultural skill, to be ranked with those whose pretensions lift them above the humble cultivators of Caroline's sands. Like her sister counties of the Eastern Shore, she has not grown too old or too wise, not to profit by the lights which science is shedding on the path of the husbandman; she is not so blind as a respectable acquaintance of mine, who has lately been heard to say, that recently he has become satisfied of the efficacy of manure; he remarked, "I have tried manuring and after fifty years experience, I think it does do some good!"

"Heaps of compost occasionally meet the eye, fence corners, and headlands, are sometimes found scraped up into heaps, to be hauled out on the corn field; fields intended for the corn crop in the spring, may be seen thickly dotted with loads of manure. All this gives promise of a brighter future to an honest, industrious, open hearted community, whose lands are poor, but whose hearts are rich in kindly feeling."

WASHINGTON ON AGRICULTURE.

[WASHINGTON'S AGRICULTURAL CORRESPONDENCE with Arthur Young, Esq., F. R. S. and Sir John Sinclair, Bart., M. P., embracing statistical tables and remarks by Thomas Jefferson, Richard Peters, and other gentlemen, on the Economy and Management of Farms in the United States.]

Franklin Knight, Esq., has just edited and published a work bearing the above title. The book is gotten up in the most beautiful style, in quarto form, and makes what it purports to be, a *Farmer's Souvenir*. Every farmer with an American heart should possess himself of this splendid volume: for, besides containing the opinions and views of Washington, one of the best farmers of his day, upon the interesting topics discussed by him, the letters to Sir John Sinclair are all in *fac-similie*, and therefore greatly enhanced in value. The chirography of Gen. Washington is characteristic of that great and good man, bold, free, and independent, evincive of the vigor and masculine tendencies of his mind. As every patriot should delight to possess some memento of one so rich in all the elements which constitute true dignity as was the author of these letters, we feel certain that our agricultural brethren will take pleasure in patronizing this most spendid of all the editions of Washington's agricultural writings.

A number of copies of this beautiful work have been purchased by Agricultural Societies at the North for premiums at their Fairs, for which purpose we would especially recommend it to the Societies of our own State. A copy of the edition can be seen at the office of the *American Farmer*.

FARM STOCK AND AVERAGE AGRICULTURAL PRODUCTS OF OHIO.

We have been favored by the *Ohio Cultivator*, with a copy of the "*Second Annual Report of the Board of Agriculture*" of the State of Ohio—for which favor our friend Bateham will accept our unfeigned thanks, and at the same time permit us to tender him with an expression of our gratitude for the great benefits he has conferred upon the cause of Agriculture, by his indomitable perseverance, untiring industry, and well directed talents.

From this report, which comprises statements, officially obtained under the auspices of the "*Board of Agriculture*," from a large majority of the Counties of the State, we gather the following facts:

Farm Stock in Ohio.—In 1847, there were in the State of Ohio, 472,392 *horses* over two years of age; 1205 *mules* over 1½ year old; 900,162 cattle over 2 years old; 3,365,025 *Sheep* over 6 months old, and 1,757,318 *Hogs* over 6 months old. All horses and cattle under 2 years old, and Sheep and Hogs under 6 months old, not included in the numbers above stated.

Average of Crops in Ohio.—The statements from 43 counties show that the OAT crop gave an *average* of 34 33-43 bushels per acre; the CORN crop from 49 counties gave an *average* per acre, of 44 3-49 bushels; the *average* of the WHEAT crop from the last named number of counties, was 11 19-49 bushels, per acre; the *average* of the BARLEY crop, was 31 bushels, per acre; the *average* of the TOBACCO crop, was 1000 lbs. per acre; the *average* of BUCKWHEAT, was 16 5-8 bushels, per acre; and the *average* of the RYE crop, was 18 3-10 bushels per acre.

The facts above presented, of the capacity for production of the lands of the State of Ohio are the more interesting to the people of the old States, as by contrasting that capacity with the productiveness of their own lands, they will be able to see that, after all, there is not so much cause to be running to strange countries in search of lands to till—they will find that, by clinging to the places which knew them and their forefathers in their infancy, and exerting that industry which all farmers should possess, in the improvement of their lands, they may make any soil which was once so, productive again.

What are the facts presented by the above figures? Why, that the average of the *oat* crop, in 43 counties of Ohio, was 34 33-43 bushels; now, we have known a field of 40 acres in Baltimore county, which had been ashed and otherwise manured, to yield 60 bushels to the acre: the average of *corn* in 49 counties in Ohio, was 44 3-49 bushels to the acre—this is a good average yield, but not more than any *good* land in this, and other of the old States, may, by proper care, be made to yield: the average of the *Wheat* crop, was 11 19-49 bushels per acre, a yield by no means extraordinary, and not more than can be raised in any of the old thirteen States, upon any land that wheat should be grown upon. We have known 52½ bushels to be raised within the hearing of gun shot from where we are now writing, and we do hold it to be an agricultural truth, that by the aid of lime, ashes, and other mineral manures, and Clover, there is not an acre of wheat land that might not be made to yield an average product of 20 bushels or more—then why break up the associations of life, sell off the old homestead, to go among strangers and fair worse? The average yield of *Barley*, 31 bushels to the acre, was a good one, but no better than can be grown on any fertile sandy loam in Maryland, or any other sister of the old *thirteen:* the average product of *Tobacco*, 1000 lbs. per acre is not beyond what any *good* tobacco land in our own State, or Virginia, can be made to produce—while the averages of *Buckwheat* and *Rye* 16 5-8 and 18 3-10 are only fair crops. If then, we take into consideration the greater facilities of markets, and the superiority of prices, in the Atlantic States, one wonders why there is such an incessant desire with some restless individuals to go in search of that land, which, if one has to credit the fabulous accounts which are sometimes drawn of it, yields almost without labor in a threefold ratio, besides carrying its products to market for "just nothing at all."

As an American, we delight in the expanding resources of our country, and endeavor, as much as possible, to divest ourself of the prejudice of sectional locality, but we must confess, that it always throws a gloom over the "spirit of our dream" when we hear of the abruption of whole neighborhoods, and the desertion of homes which had sheltered their late occupants and their progenitors for centuries. We deplore these removals, because we honestly believe, that the lands, which are thus left behind, with ordinary kindness on the part of their owners, might have been made to yield in abundance and been the abodes of prosperity and happiness.

The *Ohio* "*Board of Agriculture*" have collected so many interesting statistical facts, that, in view of the importance of their labors, we should be happy to see a similar board organized in Maryland and other States.

COMPLIMENTARY.—From a respected correspondent in Queen Ann's, we received the following complimentary notice of the Farmer, with a request to send specimens of the work to a number of farmers who were not subscribers, but who, our correspondent thinks, would become such on seeing it:

"Our farmers are hard to move towards anything called book-farming, but the most of them possess common sense, and must necessarily fall in with the process of improvement or desert the field. I am not addicted to flattery and beg you will not receive the assertion as such, when I declare that I would not be without the "Farmer" or some work of the kind, for 100 dollars a year. A little exertion on the part of your patrons will treble your circulation. Let every farmer on our shore read the Farmer, and a new era will dawn upon our poverty-stricken fields.

"I have prepared you an article comprising my experience and observations, &c. relative to the best mode of getting out, and of application of marl. I have been getting it out on an extensive scale for the last 5 years. The farm has fields that have been marled for 20 years. It is a source of surprise to me, that so few on our shore, are engaged in marling, in view of the fact, that there are so many farms that have unbounded quantities of this invaluable renovator.

"I have some celebrity in the management of blacks, of making the best hands out of the most indifferent, of getting much more work out of them (by gentle means) than others, &c. At some future day I may trouble you with a paper, comprising my experience in this department. The great error of our farmers is, that they present no motive to our poor slaves, and do not seem to know that they can appreciate kindness.

"I desire to procure a bushel and a half or two bushels of Alsop corn for seed. From the description given of it by Wm. P. Taylor, of Caroline Co. Va. (found in the Farmer's Register of January, '39)

I am inclined to think it would be much more productive on a part of my field than our common gourd seed variety. It is described as resembling the Taliaferro, but having a smaller stalk and a superior number of ears. If you can render me any aid in its procurement be pleased to do so."

We hope our correspondent will furnish us the papers upon the subjects noticed by him, at an early day. Any one having the corn required, would confer a favor by giving us the information.

The Charles County Agricultural Society met on the 23d ult. and made choice of officers for the ensuing year. Col. Wm. Thompson was elected President. An able Address delivered on the occasion by Col. Wm. D. Merrick is to be published.

At an adjourned meeting of the Society, held on the 24th ult., Wm. B. Stone, Esq. also delivered an Address on the subject of Agriculture.

HORTICULTURAL.

GARDEN WORK FOR APRIL.

This month is one in which the ground work is to be laid for propagating the majority of the vegetables which are intended for the consumption of the season, therefore, it is fitting that all who delight in the products of the kitchen garden, should make the most of their time, and with the view of assisting in the good work, we point out such things as should be promptly attended to.

Sowing Cauliflower Seed.—Those who desire to have this delicious vegetable ready for heading in October, should at once prepare a bed and sow some seed.

Cabbage Seed.—Prepare a bed and sow cabbage seed of early and late varieties, so as to secure a continuous supply, when the supply of your more early ones shall have become exhausted.

Planting out Cabbage Plants.—If you have plants ready, seize the first rainy season to set them out. In preparing your bed for their reception, do not be sparing of your manure, as the cabbage is a heavy feeder, and requires plenty of good strong manure to bring them to full perfection. Equal care will be necessary, in spading up the plot of ground, good tilth being indispensable to their successful culture.

Sowing Brussels Sprouts Seed.—If you did not take our advice last month and sow a small bed of these for sprouts, do so now. The mode of preparing the bed, as then recommended, is the one you should at present pursue.

Sowing Broccoli Seed.—Sow Broccoli seed. If sown early this month, and the plants be transplanted when large enough, you will have fine heads in October and November.

Peas.—Continue to drill in a few rows of peas, at intervals of two weeks, during this month and the next, and you will be able to continue your supply for your table during the summer.

Beans.—If your earlier beans are high enough to work, give them a working—and then plant more to come in when the early is done.

Lettuce.—If you have lettuce plants, set them out to head, and sow more seed.

Radishes.—You may now sow radish seed of different sorts.

Small Salading, of all kinds.—Seeds of the different kinds of small salading should he sown as early as possible, and repeated at intervals of every two weeks, so as to ensure a continued supply.

Spinach.—If you have not sown spinach seed, you may still do so, the earlier this month the better.—The Savoy spinach is probably the best. When large enough, the plants should be thinned out to stand 3 or 4 inches apart.

Carrots, Parsnips, and Beets.—If not already done, prepare a bed and sow some of each of these roots. With regard to the method, we refer to our article under the head of Root Culture in the "Work on the Farm."

Celery.—A small bed of celery should now be sown. If you have plants large enough, they may now be set out.

Potatoes.—If not already done, plant a bed of Potatoes.

Asparagus Beds.—If not already done, fork some rotten manure into your asparagus bed, clean off the rubbish, and strew salt over it, sufficient to whiten the soil.

Sowing Onion Seed.—Onion seed, if sown early this month, and properly attended to, will come to a tolerably sized bulb.

Leeks—Sow leek seed, the earlier the better.

Onion Bulbs.—These should have been planted out last month, but may still be set out.

Garlic, Shallots, and Chives.—Set these out.

Early Turnips.—If not done, prepare a bed, as we directed last month, and sow a bed of either the Early Flat Dutch, or Early Yellow.

Salsify or Vegetable Oyster.—Sow the seed of this popular vegetable, early this month. Prepare a bed by liberally manuring, thoroughly digging and nicely raking. Make your drills 6 inches asunder, 1 inch deep, rake the soil over the seed so as to cover them an inch, and finish by patting down the earth over the seed with the back of your spade. Thin out the plants so as to stand 4 inches apart, keep them clean and the ground open.

Medicinal and Culinary Herbs.—The seeds of these may now be sown, or the roots set out.

Artichokes.—The seed of these may be still sown.

Horse Radish.—If you did not plant out a bed of this healthful root last month, do so early this. No garden should be without a supply of it. Besides being one of the best condiments for the viands of the table, it is one of the very best things out of which a syrup for colds can be made.

Rhubarb or Pie Plant.—The seed of this excellent pie plant may be sown, if done early this month. It may too, be still propagated by offsets.

Nasturtium.—Sow the seeds of these in drills, as for Peas, and when the plants are six inches high they should have sticks placed for them to run upon—or they may be sown on a border, and trailed by strings upon the pailings—when the size of peas they make a pickle very like *Capers.*

Okra.—Now is the time to sow the seed of this favorite Carolina vegetable. Prepare a bed, by manuring, digging and raking—draw drills 4 feet apart, and drop the seed 8 inches asunder—when the plants are 6 inches high, draw the earth up to them—and continue to work and keep them clean.

Red Peppers.—Towards the end of this month sow the seed of these, to produce plants to set out about the end of May.

Tomatoes and Egg Plants.—The seed of these much admired vegetables *may still be sown* on a warm border, though it would have been better that they had been done last month.

Cucumbers, Melons and Squashes.—The seed of

these, in warm situations, may be planted, in open culture, the last of this month.

Fruit Trees.—When the trees *have not burst into leaf*, they may be planted within the first ten days of this month. Care must be observed in planting them, and as much afterwards, in dry weather, in watering them.

Pruning should be finished the first week in this month.

Raspberries.—New plantations of these may be made, if done the first week in this month—it will be necessary however to keep them well watered in times of drought, until they thoroughly take root.

Strawberry Beds.—Those who are anxious about the *size* of their fruit, may have their anxiety gratified by watering their strawberry beds every few days, keeping down the weeds, and clearing away the runners. One or two waterings with *horse dung tea* will greatly increase the size of the fruit. A bushel of dung will make a hogshead of tea, and may serve to be filled up a second time. In the application of this tea, the nozzle of the watering pot should be held *low*, so as not to wash the farina out of the flowers.

Grape Vine Cuttings, may still be transplanted.

Hardy Evergreens may be planted out the beginning of this month, but care observed to water them, the branches as well as the earth, every few days when there is a drought.

Shrubbery, where the leaves have not bursted out, may be planted out this month—if possible within the first ten days.

Flower Seeds may now be sown.

Box Edgings may now be set out.

Rose Bushes, and other flowering shrubs, may be planted the first week of this month; but care must be taken to water them the limbs as well as roots, whenever the weather is dry.

We wish also to impress upon our lady readers these important truths—that in all times of drought, they must *make* their gardeners liberal in the use of the watering pot, as well upon their seed and plant beds, as upon their shrubbery and other plants—that whenever they may discover cabbage or other plants putting on a sickly appearance, or infested with vermin, that they should forthwith have them watered with a decoction of soot and sulphur:—1 lb. of Flour of Sulphur and 1 quart of Soot, will make 10 gallons of decoction sufficiently strong. The soot and sulphur must be put into a small bag and have *boiling water* poured over it—when cool, the decoction will be fit to use—two or three gentle waterings with this, will generally cleanse and restore the plants to health.

With the hope that the gardens of all our patrons may be the pride of their owners, and produce in abundance, we make our monthly adieu.

For the American Farmer.

THE EASTERN SHORE OF MARYLAND.

(CONTINUED FROM 1847, No. 3, PAGE 72.)

We are confident, Sir, in the opinion, that the period is approaching, and is not far distant, when the Eastern Shore will assume a lofty position in the Science and Art of Agriculture, and with her rise in the scale of scientific culture her sickly character will decline pari passu. This opinion is regarded by many as chimerical, as an utopian vagarism, which like the castle of Scott, is based on "the moving and sightless air," with no reasonable data for its conception.

They would fain argue, that our exhausted and sickly soil will never compete with the rich and priceless lands of the West, and that thither the superfluous population of the north and east, as well as those of our shore, who are landless, will continue to emigrate.

We believe that there are agencies in motion which will effect, ere another century glides away, a perfect and happy revolution in this fair portion of our State. Those who have been leaving us for the west, have been undeceived as to the privations and hardships that are incident to the settling of a new country. The disappointment of a large portion has been so great that they have returned, with diminished means it is true, but with more correct views of the claims of the two sections, and with more settled and industrious habits. So salutary has been the influence of their misfortunes upon those who were rampant with a western mania, that the malady has subsided, and we now hear much less discussion upon the claims of the west than upon that of our exhausted fields, upon our efforts to resuscitate them.

It is certain, sir, that the disposition to emigrate is limited and waning; and it is certain that the disposition to improve our begging and grateful fields is extensive and extending. Already thousands of acres have returned a quadruple yield, under the impulse of a few dollars per acre in the form of manure and medicants, and have settled the question of the expediency of renovating the old, rather than emigrate to the new lands.

Another ball in motion, which tends to the same point and will be very efficient in producing such a state of things, is, a disposition to own a small rather than rent a large farm. This, sir, is dividing our immense bodies, too large to be conducted by an individual with advantage to himself or to the lands, into suitable tracts. I need not dwell upon the advantage that would result from this, or will result, as a general. All know that it is inherent with man to deal more kindly with his own than with another's possessions. It is by no means a difficult matter to detect the rented from that that is cultivated by its owner. There are several causes at work that will produce this division.

These large farms have been taxed by their tenants until they will (in many instances) but little more than pay the expenses of cultivation, and thus become valueless to the landholder; and he is induced, from necessity or from his interest, to dispose of a part to improve that which he retains, and so diminish his expense and increase his income by the transaction. Many have adopted as an article of their faith, (which but recently was held as heterodox,) that it is better to possess 300 acres of land that will produce 6,000 bushels, than 1000 that will yield also but 6,000. Those who have hitherto been adventurous westerners, are carving homes for their rising progeny out of the once deserted sedge fields that one after another were stricken from these large plantations as valueless appendages to their vast dimensions. They are procured for a trifle, and a trifle more expended in lime converts them into blooming fields and happy homes. No where in this happy Union can the man of limited means and ample industry better invest his hopes than in this fair section; dealt with bountifully by the Creator, but literally beggared by the cupidity and indolence of man. Nature was munificent in her endowment, but our ancestors plundered as from an inexhaustable fountain until plundering ceased to afford a competency.

Another impediment to our progress, which is waning in its potency for ill, is the sentiment that manual labor is disreputable. This imposes the greater part of the labors of the field upon the colored population. This portion of our population is rapidly disappearing. The disposition to manumit them is increasing. Thousands annually make a transit from the service of moderate and indulgent masters to the alluring and delusive tyranny of indolence, dissipation, and the multiform stages of crime, and end in disease and a premature dissolution. They are not only thus lost to us and themselves, but those who remain here become a burthen to our already over-burthened soil with indolent consumers. Our proximity to our neighbors of the North, the facility and certainty that attend the efforts to escape, induce thousands more to attempt and succeed in emigrating from our shore. So great is the drain from this source that, if it continues to increase in the same ratio that it has maintained for the last 10 years, a few years more will deprive us entirely of this source of labor. Either from necessity, or from a conviction among us that our estates, our health and happiness, as well as our morals, demand of us exercise, we are accustoming ourselves and our children to the labors of the field. Manual labor is losing that stigma which has ever been attached to it in this place; and we believe the time is not distant when it will be lauded rather than stigmatised. When this period arrives, a new era will dawn upon our agricultural character. Why can we not compete with our neighbors of the North? We have better lands by nature, better commercial facilities, and consequently better inducements to attain our goal. Deliver us entirely from blacks, and make manual labor laudable, and there will be a tide of emigration to, instead of from the shore, of that industrious class we so much need. Place the western wilds in competition with us and we must take the lead until our population is sufficiently dense. At present our soil is sickly—so is that of the West—and so are all alluvial soils in this latitude that are undrained and abound in stagnant water. Increase our population, cultivate the soil fairly, and peace and plenty and happiness will be its inevitable offspring. The pioneer to the wilderness is liable to every species of privation; and it is only after years of incessant toil that he begins to enjoy the comforts of civilized life. His children have grown up as the wild Arab, and are unfitted for refined society, and consequently for its delights. Reverse the medal. 5 dollars per acre (15 will not clear an acre of new) in lime, &c. on lands that can be bought here for $5, will soon make the heart rejoice in a smiling field. No forbidding roots and stumps vex and tire you; the surface is level and easily tilled, and a few cents per bushel lands your produce in Baltimore or Philadelphia. Your friends are with you and not left in a distant State; your children are educated and with a moderate store of industry; you have not only a competence but a surplus for a stormy day.—Ye hardy sons of the rugged North and East, go no further west than the Eastern Shore of Maryland, until you have filled every nook and corner of her inviting soil!

Mr. Editor, you will excuse the desultory style of this sheet; in several instances there is that which savors of tautology; it is written in haste, and time does not permit me to transcribe.

Respectfully,

AN EASTERN SHOREMAN.

Feb. 12, 1848.

PREPARATION OF BONES FOR MANURE

MOBILE, Ala. January 22d, 1848.

To the Editor of the American Farmer.

DEAR SIR:—In an article, in the July number, (1847) of your valuable periodical, directions are given for the preparation of Bones for manure by dissolving them in sulphuric acid and water. The directions are to "take 100 lbs. of bones and place them in a kettle or old tub, &c. Next take from 30 to 35 lbs. oil of vitriol (sulphuric acid) mixed with ½ to ¾ its weight of water and pour over the bones," and it is stated that in a day or two the bones will dissolve into a liquid paste, &c. Now I have tried this experiment, and am satisfied that there is either a mistake in the figures of your correspondent, or else he himself is grossly at fault in his directions. In the first place the quantity of liquid mentioned above will not cover one-third of the bones in their natural state, and consequently the quantity of acid thus poured over them "in a day or two," becomes absorbed by the bones without materially affecting any part of their composition except the soft and spongy parts.

It is possible that if the bones were broken into comparatively small fragments they might be dissolved by the process recommended; but this clearly was not contemplated by the writer. If it was, his directions are very faulty; and as they may mislead and involve others in unnecessary expense, I avail myself of the occasion to call your attention to the subject; in the hope that I shall see in your next number some correction or explanation of the mistake or inaccuracy that characterizes the article in question; (see American Farmer for July, 1847, p. 14). If 30 or 35 lbs. of sulphuric acid will dissolve 100 lbs. of bones it will make the cheapest manure known to agriculture. But unfortunately, I fear it will require twice or three times that quantity of acid.

While on the subject of manures I really wish you could prevail upon those who advertise them in your journal to give the prices in their advertisements.—This would be a great convenience to farmers at a distance, who would in this way, (without the delay and expense of a correspondence) be enabled at once to order what they wanted, if the prices would justify it.

I think you would confer a favor on many of your readers by enumerating the different kinds of manure kept for sale in the large towns and cities, with the average price annexed. For example, *alum stone lime*, *plaster*, *bone-dust*, *ashes*, *leached and unleached*, *guano*, (different varieties), *poudrette*, *&c.* We who live at this distance from places where these articles are extensively used for farming purposes, are very much in the dark as to the cost of them. If more of this sort of knowledge was disseminated, I have no doubt it would tend greatly to augment the consumption, and materially swell the profits of the valuable class of persons engaged in the business of preparing and vending manures."

The article to which our correspondent alludes, was copied into our paper from another journal—We published in our July No. of the 1st volume (1845), an article upon the same subject, being the report of the celebrated Mr. *Pusey*, M. P. of England, to the Royal Agricultural Society, from which we republish the following paragraphs:

PROPORTIONS.—1. *Bones and Acid.*—The proportion of acid had generally been one-half of the weight of bones employed; but one-third, or even one

fourth of the weight of bone might be used with success, if occasion required. That was an important point in the economy of the manure, as it affected the cost materially. 2. *Water.*—The proportion of water had generally been 100 times the weight of acid; but 50 or 25 times the weight of acid would serve the purpose required very efficiently. The fact was one likely to be of great use, one of the main practical difficulties to contend with in the application of dissolved bones being the large quantity of water which had been considered necessary. Mr. Hannam's results showed that four bushels of bones (12st), 6 st. of acid, and 300 st. of water (50 times that of acid) gave 420 gallons of dissolved bones to be applied per acre; while 150 st. of water (25 times that of acid) would suffice. It was, however, worthy of notice, in reference to the preparation of the mixture, that the bones should be pulverized as much as possible before they are mixed with the acid, in order to render the solution more complete; but should that not be the case, and a few of the larger portions of bone be left undissolved, that circumstances would occasion no injurious effect, as there would be bone enough dissolved for the plant in its early stages, and the larger portions would disintegrate by degrees and come into operation towards the end of the season.

Dissolved Bone Compost.—Mr. Pusey thought that however great a point was gained by reducing the bulk of the water employed for diluting the solutions of the bones, a still greater step was attained by substituting altogether the compost for the liquid form of the application. In the society's last journal, p. 596, Mr. Tennant, of Shields, near Are, gave the following account of his practice:—"I put 25 bushels into three old boilers (of which every farm here has a supply,) and next poured in two bottles of acid, of about 170 lbs. each, and 36 Scotch pints, (18 imperial gallons,) of boiling water into each boiler. It boils away at a great rate for some time, and in a day or two we empty the boilers into two casks of light mould, and turn the mixture over—at this stage the bones are only partially dissolved, but they heat and decompose in the heap, after being turned over three or four times; and in the course of seven or eight weeks the compost becomes dry, and breaks down like a shovel in a fit state for spreading with the hand in the drill." Mr. Thompson stated that he had himself last year found 4 bushels of dissolved bones applied in the form of compost, fully equal to 20 loads of farm yard manure, there being no perceptible difference in the crop throughout the field.

Liebig's Plan for Dissolving Bones.

After stating that 40 lbs. of bone-dust—(with the other manure) is sufficient to supply three crops with phosphates—he adds:

"But the form in which they are restored to a soil does not appear to be a matter of indifference. For the more *finely* the bones are reduced to powder, and the more intimately they are mixed with a soil, the more easily are they assimilated. The most easy and practical mode of effecting their division is to pour over the bones, in a state of *fine powder*, half of their weight of sulphuric acid, diluted with three or four parts of water, and after they have been digested some time, to add one hundred parts of water, and sprinkle this mixture over the field before the plough."

Our correspondent will perceive, that the error which he committed, consisted in his *not having reduced his bones to a fine powder.* [See also page 328.]

Bones for Manure.—Dissolving bones in sulphuric acid has been latterly practiced in England, and is considered a preferable mode to applying them in a broken or crushed state. But Professor Way, in a late lecture on the growth and culture of turnips, states that he prefers muriatic to sulphuric acid for several reasons, though he thinks we may combine the benefits of both plans by the use of salt in addition to that of bones or sulpuric acid. He directs—to two bushels of bone-dust, covered with 12 or 15 gallons of water, half cwt. of common salt to be added. When the salt is well mixed and dissolved, half cwt. of the oil of vitriol (sulphuric acid) is poured upon the mixture. In these circumstances muriatic acid is produced, which dissolves the bones. This compound is said to have a great attraction for water; and it will be found to collect the moisture of the atmosphere, and keep the earth moist, even in a severe drought.

COL. JOSIAH WM. WARE'S COTSWOLDS.

MR. CHRISTIAN'S MERINOS.

In our January number we noticed several specimens of wool clipped from the flock of Cotswold sheep of Col. Ware, of Clarke County, Va., and were innocently led into the mistake that they were not thorough-bred from the manner in which the term "crossed" was used in the evidence which we then had before us. The subjoined letter from Col. *Ware*, will correct our error, and we publish it with the more pleasure, as it affords us an opportunity of doing justice to the praiseworthy exertions of a gentleman to whose laudable enterprise the farmers and graziers of Western Virginia are largely indebted for the introduction of a most valuable breed of sheep—and to whose correct judgment in the management of them, they are equally indebted for the very manifest improvement he has effected by his skilful breeding.

The specimens of *Merino Wool* enclosed us by Col. Ware, as taken from the sheep of Mr. *Samuel F. Christian*, near Greenville, Augusta county, Virginia, are beautiful, and do great credit to their spirited raiser. They will compare favorably in fineness with any samples we have seen for years, and prove conclusively, that the montane regions of the Old Dominion are as eminently adapted to the growth of *fine wool*, as they have been celebrated for the production of "*mountain mutton*"—a celebrity which has been awarded them for years by every good judge in the country, who may have had an opportunity of testing its excellence.

Though we have not the honor of an acquaintance with Mr. *Christian*, we feel that we are his debtor in feeling, as the interest which we take in whatever concerns the prosperity of the agricultural classes, converts into the relation of creditors, all who struggle to elevate the standard of their morals or enlarge the sources of their wealth—and certain are we that the success of Mr. Christian in breeding *Merinoes*, will tend to do both, as the effect will be to stimulate others to follow his example—an example which cannot fail to increase the means, and consequently to expand those elements of mental as well as physical improvement which ever give impetus to the onward march of communities, and never fail to leave the grateful impress of its doings on all within the sphere of its influence.

The *weight* of the *fleece*, as well as that of the *carcass* of Mr. Christian's Merinos, show that amidst his mountain lands this noble family of sheep have found a *home* congenial to their habitudes and their wants,

and that there, under judicious management, they are destined to have the fullest meliorations and developments, of which they are susceptible, brought about. In conclusion, we will express the hope, that, ere the present century passes by, every mountain slope and top of Western Virginia will be covered with its flocks of fine wooled sheep.

NEAR BERRYVILLE, Clarke co., Va. }
February 9th, 1848. }

To the Editor of the American Farmer.

DEAR SIR:—In your Farmer for January, 1848, in noticing my Cotswold Sheep, I find the following: "The sheep though called *Cotswold*, are, we learn, not thorough bred—but that Mr. Ware by judicious crossing has greatly improved the original base of his superstructure, which was Cotswold." This was erroneous, my flock of sheep are *pure bred Cotswold*—my improvement was solely, by crossing (I think) judiciously with bucks not at all related to the ewes—in fact of *different families*, but of the *same breed*—changing my bucks every two years, so as to prevent the possibility of incestuous intercourse—I have crossed from no other breed—you were undoubtedly led into this error, by notices of some ewes bought of me for breeding purposes, and some muttons sold by me to Mr. Otterback; all of the former were part bred only, and a larger part of the latter—and *they* were particularly stated as "part bred," to *prevent* any *erroneous* impressions.

From the great interest you have taken in every matter connected with farming—(which makes your journal of inestimable value to the farmer, gardener, and housekeeper—that no family, whether farmer or not, ought to be without it,) I feel assured you will excuse the liberty I take in calling your attention to some specimens of fine wool (enclosed) from a flock of Spanish Merinos, owned by Mr. SAMUEL F. CHRISTIAN, *near Greenville, Augusta Co. Va.*—his sheep, I have no doubt, are very fine and will compare advantageously with any flock of fine-wool sheep in the United States. I have not seen them, but am credibly informed they are "almost as handsome in carcass as South-downs, ewes weighing gross from 110 to 125 lbs., and giving an average of near 5 lb. of wool washed on the back;" here would probably be the best chance for any of the readers of your most valuable journal, who prefer the fine wool sheep to supply themselves with breeders—he will sell them at moderate rates, and of undoubted purity, for he is most particular in keeping the blood in its purity, as well as a most energetic and judicious breeder.

Mr. Christian is now beginning to raise the Cotswold sheep, having this fall purchased of me a buck and a few ewes of the pure Cotswold blood.

In concluding let me tender my best wishes to the venerable American Farmer (the parent, I believe, of agricultural papers in the United States,) may its head, if whitened by age, not bloom to dissolution, but continue in full health and vigor, to spread its usefulness among a greatly increasing number of subscribers and supporters through future generations.

Respectfully, yours,
JOSIAH WM. WARE.

APPLE WITHOUT CORE OR SEEDS.

BALTIMORE COUNTY, Feb. 5th, 1848.

DEAR SIR:—If it is the duty of a parent to afford counsel and advice to his offspring, and assist them in their need, how much more is it the prerogative of the "*American Farmer*," the acknowledged head of the enlightened followers of agricultural pursuits in this section of the country, to afford information to its thousands of readers. That you are both willing to listen to the questions of those seeking advice and able to answer them, each number of the "Farmer" abundantly testifies. Permit, then, one of your readers to trespass upon your time for a few moments.

Happening to cast my eyes, a few days ago, upon a small piece of paper, my attention was attracted to the following intelligence:

"A CURIOUS APPLE.—Scions of an apple tree have been received, says the Boston Cultivator, from near Ticonderoga, N. Y. where alone it is propagated, bearing a kind of apple which has neither core nor seeds. The origin was as follows:—The top of a young tree was bent over and covered with earth, which took root. The tree was then cut asunder, which stopped all connexion with the natural root of the tree, and, by sprouts which sprung from the top portion of the body, a regular top was formed, which produces this fine fruit—a beautiful red, good size, very pleasant table apple in the fall."

What I wish to know, is, whether you have ever heard of such an apple; and if so where trees of the kind may be procured, and at what price. My opinion is that no such apples could be produced; but as the notice is taken from the "*Boston Cultivator*," there may be some grounds for the statement. I am convinced, that, by inserting the above article into your columns, you will at least bring before your readers something with which they are unacquainted; and that a number of such trees might be advantageously disposed of.

Permit me to congratulate you upon the permanent basis upon which you have established the "Farmer," and the success which has crowned your efforts; and your readers upon having access to such a periodical.

A SUBSCRIBER.

[We regret that we are unable to throw any light upon the subject of our correspondent's inquiries. We observed at the time of its insertion the paragraph of the "*Boston Cultivator*," which we now embody in the above communication. As this particular variety of apple appears to have elicited the curiosity of our correspondent, we shall feel indebted to our excellent and enlightened friend, the editor of the "*Boston Cultivator*," if he would give the desired information.—EDITOR AMERICAN FARMER.]

GUANO.

From Travels in Peru, by Dr. John J. Von Tschudi.

COMMUNICATED FOR THE AMERICAN FARMER
BY PROF. DUCATEL.

Opposite to Pisco and Chinca there is a group of small islands, of which the largest, Sangallan, is six English miles distant from Pisco. These islands have of late years become celebrated on account of the great quantity of Guano that has been exported from them.

Guano—(or according to the more correct orthography, Huanu, which is a term in the Quichua dialect, meaning "animal dung"—is found on these islands in enormous layers of from 35 to 40 feet thick. The upper strata are of a greyish-brown color, which lower down becomes darker. In the lower strata, the color is a rusty red, as if tinged with oxide of iron. The Guano becomes progressively more and more solid from the surface downwards, a circumstance naturally accounted for by the gradual deposite of the strata, and the evapora-

tion of the fluid particles. Guano is found on all the islands, and on most of the uninhabited promontaries of the west coast of South America, especially in those parts within the tropics. I have often been assured that beds of guano, several feet high, covered with earth, are found in land at some distance from the sea; but I never met with any, and I have some doubt of the correctness of the statement. If, however, these inland strata exist, I am inclined to believe that they can only be found on hilly ground: and in that case, they afford strong evidence of a considerable elevation of the coast.

Guano is formed of the excrements of different kinds of marine birds, as mews, divers, shearbeaks, &c.; but the species which I can name with more precision are the following: *Larus modestus, Tsch.; Rhimchops nigra, Lin.; Plotus Arhinga, Lin.; Pelecanus thayus, Mol.; Phalacrocorax Gaimaesdii*, and *altigula*, (*Pelecanus Gaimardii, Less.; Carbo altigula, Brandt,*) and chiefly the *sula variegata*, Tsch.

The immense flocks of these birds, as they fly along the coast, appear like clouds. When their vast numbers, their extraordinary voracity, and the facility with which they procure their food, are considered, one cannot be surprised at the magnitude of the beds of guano, which has resulted from uninterrupted accumulations during many thousands of years. I kept for some days a living *Sula variegata*, which I fed abundantly with fish. The average weight of the excrement daily was from 3½ to 5 ounces. I have no doubt that when the bird is in a state of freedom, the weight must be much greater, for these birds are constantly ploughing into the sea, in order to devour the fishes which they find in extraordinary numbers around all the islands. When an island is inhabited by millions of sea birds, though two-thirds of the guano should be lost while flying, still a very considerable stratum would be accumulated in the course of a year.

The marine birds nestle on the uninhabited islands or on rocks near the shore; but they never settle on the flat beach, or on any place distant from it inland. On this fact I ground my conjecture that those beds of guano in the interior, which may have been removed from the shore by important elevations of the coast, are to be found only on hills.

During the first year of the deposite the strata are white, and the guano is then called *Guano Blanco*. In the opinion of the Peruvian cultivators, this is the most efficacious kind. It is found in the *Punta de Hormillos*, or the islands of Islay, Jesus, Margarita, &c.

As soon as the dealers in guano begin to work one of the beds, the island on which it is formed is abandoned by the birds. It has also been remarked, that since the increase of the trade and navigation they have withdrawn from the islands in the neighborhood of the ports.

Much has been recently written on the employment and utility of guano; but the manner in which it is applied as manure in Peru, seems to be but little known. The Peruvians use it chiefly in the cultivation of maize and potatoes. A few weeks after the seeds begin to shoot, a little hollow is dug around each root and is filled up with guano, which is afterwards covered with a layer of earth. After the lapse of twelve or fifteen hours, the whole field is laid under water, and it is left in that state for some hours. Of the *Guano Blanco* a less quantity suffices, and the field must be more speedily and abundantly watered, otherwise, the roots will be destroyed. The effect of this manure is incredibly rapid. In a few days the growth of a plant is doubled. If the manure be repeated a second time, but in smaller quantity, a rich harvest is certain—at least, the produce will be three-fold that which have been obtained from the unmanured soil.

The haciendas of the Valley of Chancay have, during the last fifty years, consumed annually from 33,000 to 36.000 bushels of guano brought from the islands of Chancha and Pisco. The price of the bushel of colored guano is one dollar and a quarter, and the price of the white from two to three dollars. The price has recently undergone many fluctuations, in consequence of the great exports to Europe.

The employment of this kind of manure is very ancient in Peru; and there is authentic evidence of its having been used in the time of the Incas. The white guano was then chiefly found on the islands opposite to Chincha: so that for upwards of 600 years the deposite has been progressively removed from those islands without any apparent decrease of the accumulation. The uniformity of climate, on a coast where there is not much rain, would contribute to render the Peruvian guano a more active manure than the African, as fewer of the saline particles of the former being in solution, they are consequently less subject to evaporation.

From the London Gardeners' Chronicle and Agricultural Gazette, of Jan. 1, 1848, furnished by a respected friend to the editor of the "*American Farmer.*"

MAIDSTONE: *The Composition of Artificial Manure.*

Mr. WHITING, in introducing the subject, stated that the great object of the farmer should be to ascertain what inorganic or mineral ingredients the crops took out of the soil, with a view to ascertain what ought to be put into the soil in order to grow them. Mr. Way, now the consulting chemist of the Royal Agricultural Society, had analysed about 50 specimens of different sorts of Wheat, and had come to a conclusion, that an average crop of Wheat took out of the land the following inorganic substances:

84 lbs. of silica	6 lbs. of magnesia
20 lbs. of phosphoric acid	1 lb. of peroxide of iron
4 lbs. of sulphuric acid	23 lbs. of potash
8 lbs. of lime	1 1-2 lb. of soda.

It would be seen that the most important ingredients of Wheat were phosphoric acid, and the alkalies—potash and soda. If these were returned to the land in sufficient quantity, the minor mineral ingredients, such as silica, lime, magnesia, iron, &c., would in the greater number of cases be supplied by the soil. The phosphoric acid was most conveniently returned in bone-dust, which contained from 50 to 60 per cent. of the phosphates, or in the superphosphate of lime, of the composition of which he should speak when he came to consider the best manure for Turnips. The alkalies might be supplied singly in the shape of nitrate of soda or nitrate of potash (saltpetre,) both of which it was known to the members that Mr. Barnes had used with decided success. Guano was valuable, inasmuch as it comprised, not only a large proportion of phosphates and alkalies, but also what was of great importance, particularly to the young plant, a considerable portion of ammonia. This led him to speak of the organic ingredients of Wheat, which had not been mentioned in the enumeration of inorganic ingredients of Mr. Way. The principal of these organic substances were carbonic acid and nitrogen, both of which existed in the air; but it was from the ammonia of decaying animal and vegetable substances that plants derived their principal supply of nitrogen, ammonia being composed of nitrogen and hydrogen. When a plant was burned,

the organic portions flew off into the air, whilst the ashes comprised the mineral or inorganic ingredients. Ammonia was essential to the growth of Wheat, and this might be supplied to lands which abounded in all the mineral ingredients, in the shape of sulphate of ammonia, which might be manufactured from the liquor obtained from the gas works of every town. Mr. W. then read the account of an experiment at Haveringatte-Bower, Essex, where 1¼ cwt. of sulphate of ammonia, at a cost of 1*l.* 1*s.* 9*d.*, had produced 586 lbs. of Wheat (over that produced on unmanured land,) whilst 1 cwt. of nitrate of soda, costing 1*l.* 4*s.* 6*d.*, had produced 468½ lbs. of Wheat, and 1 cwt. of nitrate of potash (saltpetre,) at a cost of 1*l.* 7*s.* 6*d.*, had produced 453 lbs. of Wheat. In alluding to the best manure for Turnips, Mr. W. referred to the experiment tried by the Rev. Mr. Huxtable, in which that gentleman had grown 20 tons of Turnips and 5 tons of tops from an acre of the very poorest land on the side of a chalk hill, by the use of an artificial compound, which, with the cost for one acre, is thus described by the experimentalist.

	£	s.	d.
30 bushels of wood-ashes at 6*d.*	0	15	0
2 cwt. of Ichaboe guano at 7*s.* 6*d.*	0	15	0
50 lbs. of burnt bones and 22 lbs. of sulphuric acid	0	7	0
30 bushels of sawdust	0	2	6
Labour account in hoeing, drill, dropping seed (the surface of the land being otherwise untouched)	0	19	6
10 lbs. of sulphuric acid poured over ashes	0	1	3
Rent 5*s.*, rates, &c., 2*s.*	0	7	0
Seed, 5lbs. per acre	0	3	6
A pair of horses hauling the artificial manure to the summit of the hill	0	7	0
	£3	17	9

This showed the extent to which the constituents of a crop could be supplied by artificial means, if the farmer only studied the composition of the crops which he wanted to raise. The best mode of supplying the phosphate of lime, which he had mentioned as forming an essential ingredient in most crops, was in the shape of bone-dust, or sulphated bone-dust. Bone-dust comprised a large proportion of this substance, and to render it soluble and easily available to the young plant, a plan has recently been introduced of dissolving it in sulphuric acid, thus forming superphosphate of lime. Phosphoric acid was capable of combining with lime in two proportions. When mixed with sulphuric acid, that substance combined with a portion of lime (forming sulphate of lime, or gypsum,) thus leaving a less quantity of lime than before combined with the same quantity of phosphoric acid, which formed what was called a superphosphate of lime. Mr. Spooner, in his prize essay on the subject, thus described the best mode of adding vitriol to bones:—"A very convenient and cheap vessel for manufacturing the mixture is a sugar hogshead, having its holes stopped with plaster of Paris. It is very desirable to avoid if possible any measuring or weighing of the acid, as it is so very dangerous a substance to handle. Many serious accidents occurred to my knowledge during the last year, and it is very difficult to impress farm servants with a sufficient degree of caution, or even to convince them that a liquid which appears so colourless will burn their skin and clothes. In emptying a carboy of acid, even in a tub, it is difficult to prevent a little slopping about and damaging the clothes of the attendants, as well as the basket, &c., which contains the carboy. To prevent these unpleasant consequences, I have adopted the following plan:—The carboy is placed on a stage or cask the same height as the sugar hogshead, into which is put the precise quantity of bone-dust we intend mixing with the carboy of acid. The water is now added with a watering-pot having a rose at the end, so as to disperse it thoroughly, and the carboy of acid is then emptied by means of a syphon. This syphon is formed of a piece of block-tin pipe, which can be bent into any form, about ¾ of an inch in calibre, and 4 feet in length. A brass cock is soldered to the long end of the syphon, on which the rose of a watering-pot may be placed. The syphon is now filled with water, and its long end closed with the cock, and the small end with the hand or finger. The latter is then quickly inserted into the mouth of the carboy, the cock turned on, and the acid will continue to flow till the vessel is nearly empty, without any assistance, so that the attendant has no occasion to expose himself to the injurious and offensive fumes which almost immediately begin to escape. He may, however, approach the windward side of the tub, and give the mixture a little stirring, which should be continued for some little time afterwards, so that the mixture may be complete. A convenient utensil for this purpose is a fork with two long teeth, bent at some distance from the grains nearly at right angles, and fixed in a wooden handle. On the same day a fresh lot of bones may be added, and the process repeated until the hogshead is nearly full. In two days afterwards the mixture may be shovelled into a heap, and either remain till wanted, or mixed at once with a certain portion of ashes. It should be shovelled over several times, and ashes added to it each time of turning, which will thus render the mixture fine and dry enough to pass through an ordinary drill. It must be evident that much of the value and economy of the manure depends on its being perfectly mixed, so that every particle of bone should be exposed to the action of the acid. In many cases I have no doubt this has not been sufficiently attended to, and the result has been either that more acid has been used than is really required, or that much of the advantageous effect has been lost. By the method which I have here recommended, and which I have adopted after many trials, the mixture can be readily and accurately manufactured, and with perfect safety to the attendants." Numerous trials (said Mr. W.) had established the efficacy of superphosphate of lime, by which the anticipations of Mr. Spooner had been completely borne out.

THE FARMERS' LIBRARY—THE AMERICAN FARMER.

A gentleman of St. Mary's County writes us in regard to the Farmers' Library, edited by our friend Skinner, thus:

"I am only in receipt of my numbers a few days, and have devoted all my leisure moments in the perusal and study of the same. Richly have I been repaid for my labors (if I may so call them) and very much am I surprised that this work has not a circulation amongst us, commensurate with its value and deserts. Already have I been told that I gave too much for this work! But I am far from acknowledging this to be correct. My own idea about the matter is simply this—the work is either worth having or it is not,—if it is not, why then it is not worth one dollar much less five. This no sensible man will affirm. If then the work be worth any

thing at all to a farmer or planter, it must save him hundreds, nay perhaps thousands of dollars. But in paying this small tribute to the Library, let me not pass over in silence *our own* Farmer, which presents itself to us monthly, teeming with the rich treasures of practical and scientific productions. It can boast of very many learned and practical contributors from whose pens the science of agriculture does and will doubtless continue to receive, many rich offerings. I have read with very great interest, the respective papers of Messrs. Capron and Learner, as they have appeared in your journal, and doubt not but your every subscriber has been equally delighted and instructed. The struggle was a well contested one, and neither of the two heroes has anything to boast. Both were right, and neither could be convinced to the contrary. Col. Capron was certainly correct, so likewise was Learner, and the only difference is, that one was giving advice to the man of means, the other to the man in moderate circumstances.

Yours very truly,

J. E. C.

MULTICOLE AND MID-SUMMER RYE.

BOKHARA CLOVER—GAMA GRASS.

Milestown, February 18, 1848.

To the Editor of the American Farmer.

MR. EDITOR:—I see in Ellsworth's Report on Patents, for 1844, a variety of Rye, styled the Multicole Rye, and reference made to the "London Farmers' Magazine," for the character and advantages of this variety—also therein is mentioned another variety known as the Mid-summer Rye, and reference made to Towson's Agriculturists' Manual, likewise for the profits and peculiarity of this variety—the information here given is very brief and unsatisfactory—will you do us the kindness to give us all the light you may have, or can obtain on these matters, in your next. There is also spoken of in the same document, a Gama Grass and a Bokhara Clover, upon the characters of which we would like to be informed, which you will please to do as soon as possible, and also where the seeds of these grains and grasses can be obtained, and at what prices.

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We have nothing in addition to state to what we have from time to time published relative to *Multicole Rye, Mid-summer Rye, Bokhara Clover*, and *Gama Grass*.

The Bokhara Clover was cultivated for soiling purposes at Mount Airy, Pa., by that accomplished husbandman, James Gowen, esq. He states that it will give more food than almost any other plant. It requires to be cultivated in drills and kept clean.

The *Gama Grass* we have cultivated ourself, and look upon it as among the most productive of all grasses—when cut every few weeks it makes an excellent fodder, and in very rich ground, sown in drills, kept clean, and top-dressed occasionally, we believe that 8 tons of hay might be made from an acre in a single season. But then the fact of its being necessary to *cultivate* it, is calculated to prevent its general introduction into American husbandry.—It can be propagated by seed and by the roots. We obtained our seed from Charleston, S. C., as also some from St. Stephens, Alabama.

Where the Multicole and Mid-summer Rye and Bokhara seeds are procurable we know not.—EDITOR AMERICAN FARMER.

SWINE.

SHINGLETON, Sussex, Va., March 4th, 1848.

To the Editor of the American Farmer.

SIR:—It appears that farmers in this portion of Virginia are beginning at last to appreciate the value of improved stock, especially the improved breed of swine. The Berkshires have had their day; the Chester and Chinese are reared pretty extensively, and there are many of the common stock that have been improved by judicious crossing. No object on the farm demands the strict attention of the master more than his stock of hogs; no stock can be so easily improved. The farmer can, by proper care and judicious crosses, obtain exactly the hog he desires, if he has the pure breed to commence with to further this object.

I desire to make an inquiry through the Farmer, in regard to the Woburn and Kenilworth breeds, and I trust that some farmer who has the said stock will answer this inquiry: I make it for the benefit of *others* as well as myself; and any one having the *pure breeds* for sale, will find it to his interest to answer my inquiry. What would a pair of Woburn pigs be worth, delivered in Petersburg, Va.?—furthermore, what would a pair of Kenilworth pigs be werth, delivered at Petersburg, Va.?—the seller of the pigs being responsible for their safe delivery. I have not the least doubt that if the above stock could be bought at a *reasonable price, many farmers would purchase.*

Yours,

THOS. E. BLUNT.

THE POTATO ROT.

KENT COUNTY, Feb. 21, 1848.

To the Editor of the American Farmer

DEAR SIR:—Some weeks since I promised you a communication, stating my experience in regard to the Potato Rot; and as the season is fast approaching when, in my opinion, all that wish to escape the malady in their crop, should embrace for planting, I will endeavor to give it in time for the March No. of the Farmer, the results of some five or six crops, out of which two only escaped the disease. First, in regard to my own—my early potatoes escaped. I planted two varieties, the Mercer and an early blue skinned potato, the seed of which were originally obtained from the North, some twenty years since: both were planted in March, and yielded tolerably well. I had one rood of land planted in each kind, and obtained about forty bushels of good large potatoes from each rood, and there is no appearance of rot visible in either as yet; the land had been limed last August upon the sod, at the rate of fifty bushels per acre upon a clover sod. About the middle of June I planted some of the old fashioned red potato in land that had been heavily limed, broadcast, a short time previous, and on which lime had been applied two years since; but the land was rather low and wet; these became so very defective by the first of October, that they were not worth plowing out. A few weeks after, about the first of July, I planted about three acres of land with the red variety and the Mercer, which was the virgin soil in which a plow had never run before; a portion was limed in broadcast and a portion manured with a mixture of lime and ashes, applied in the furrow—but all were badly rotted—the mercers were not so much affected as the reds, the latter were so worthless that I never plowed them out. There was the bottom of an old coal kiln in the patch, where the soil

contained carbon enough to render it perfectly black, and I should suppose sufficient to destroy vegetation of any other plant except the potato, and I observed those particularly that grew upon it—they produced very few tubers, and those were as much affected as the rest. The land was dry and sandy, with a clay subsoil, and upon a slope. Two of my neighbors planted the same kind of land recently cleared, with better success; one escaped, the other was but partially affected; the first applied lime, the other no manure whatever; both planted about the same time that I did, and they are the only instances of the latter crop escaping that has come to my knowledge; whereas, in the forward crops planted before the first of April, I have heard of no case of diseased potatoes. I have seen some samples of forward potatoes that were suffered to remain in the ground until late in the fall that were rotted on the end; but a careful observer will discover that it is very different from the disease, and nothing more than the natural decomposition to which we have always been accustomed.

The inferences that I have drawn from the above facts are, first, that to escape the disease the crop should be planted in March, or earlier—that neither lime, ashes, or charcoal is a preventive, and that it is not confined to any particular variety nor to any particular soil; and that land but recently brought into cultivation is not certain to escape, although the crop planted upon the fresh soil may be less liable. (The timber in this case had been cut from the land but a few months, and the size of the trees is proof positive that it has never been cultivated since the settlement of the country.) I would not wish to deter any one from the application of lime or ashes to their potato crops, as both act well as manures, but would wish to caution them from relying upon them to prevent the disease, being convinced that nothing that I have seen recommended will prevent it, if planted later than April. The disease is new to us, it never having made its appearance here until last fall.—I have seen a great deal of speculation relative to the poisonous qualities of potatoes affected. Many farmers here fed them to stock in October and November, without any apparent deleterious effect; but a week or two since, I saw some hogs that were singularly affected by eating them—they were taken with a tremulous affection, similar to a person under the effects of a severe chill, which produced death very soon. The fowls that eat them were also affected in the same manner. The impression now is, that they are only deleterious when the disease has pervaded the whole tuber and they become perfectly rotten. But I very much doubt if a diseased potatoe contains much nutriment at any time—stock fed on them seem to thrive but slowly.

Your's respectfully,

A FARMER.

COMPOSTS FOR COVERING CORN IN THE HILL.

To the Editor of the American Farmer.

"SIR—Can you inform me what would be the cheapest compost with which to cover my corn in the hill? Give me the quantities per acre.

A SUBSCRIBER."

Without attempting to say what is the "*cheapest*," we will state what we know would prove *good*. But while we are doing so, we beg leave to state that we hold all husbandry which relies upon manuring *solely* IN or ON the hill, as wrong in principle, and therefore not to be resorted to except in cases of necessity, where the parties may not have the manure to give a broadcast dressing to their entire fields. Where time and opportunity may concur, we would recommend manuring in or on the hill, as an *auxiliary* means, with the view of giving an early start to the growth of the corn plants—a thing always desirable; but, unless compelled by the overshadowing influence of such a necessity as we have alluded to, we would *never* resort to it as a *sole* means of ensuring our success, as all improvement to land should look to the *general*, and not to the partial melioration of the soil.

COMPOST No. 1.

10 bushels woods-mould,
1 bushel plaster, and
5 bushels ashes.

Mix the whole together well, and give to each hill of corn a *handful* of the mixture at the time of planting, then cover up.

COMPOST No. 2.

5 bushels of well rotted manure,
3 bushels of ashes,
1 bushel of plaster,
1 bushel of soot.

Mix and use as before directed in No. 1.

COMPOST No. 3.

10 bushels of mould,
1 bushel of plaster,
1 bushels of salt,
2 gallons of soft soap.

Mix, and use, as directed in No. 1.

COMPOST No. 4.

10 bushels of mould,
1 bushel of Plaster,
10 gallons of Urine.

Mix, and use, as directed in No. 1.

COMPOST No. 5.

10 bushels mould,
2 bushels bone-dust, and
1 bushel plaster.

Mix, and use, as directed in No. 1.

These composts may be used *in* the hill at the time of planting; *on* the hill at any time before the plants come up, or after the plants come up, at the time when the corn may be first worked. Be the time of application whensoever it may, the results will be highly beneficial in increasing the product.

March Snow.—It commenced snowing on Thursday, the 2d March, at 11 o'clock, A. M. continued snowing throughout the day and until 11 o'clock at night. The fall of snow was probably equal to 6 inches in depth upon a level, and as there was little or no wind at the time of the fall of the snow, there was no drifting, and, consequently, the earth, in these parts, must have been very generally covered to the depth named above. From the power of the sun it did not remain long, and we are not prepared to say what influence, whether for good or evil, it may have exerted on the winter grain, but as it afforded a fine opportunity for the sowing of Clover seed, we sincerely hope that all farmers within the range of its fall, availed themselves of the opportunity of casting clover seed upon its bosom; for we do hold it as of a truth, that none should omit to sow their wheat fields with clover, as improvement of the soil cannot be perfectly carried on without this meliorating crop. Lime, of itself, will do much, but much more where Clover isprovided for it to act upon.

THE HESSIAN FLY—ITS RAVAGES.

The following article contains facts and reasoning which are worthy of the serious consideration of every wheat grower, as the crops of all are subject to the attacks of this destructive enemy. And while we thus bring before our readers the evidences of the benefit resulting from the application of Plaster to fields of wheat which had been injured by the attacks of the Hessian fly, we would suggest that, in our opinion, equal advantage might result to its application to such fields as may have been *winter-killed*, provided they be first harrowed and rolled. We are aware that the common belief is, that plaster contributes to the formation of straw and is detrimental to that of the *grain*, but we confess we are not of the number of such believers. Fields of wheat whereon plaster may have been applied may have yielded much straw and comparatively little grain, but we suspect the cause would have proved to have been referrible more properly to something else than the plaster, if the truth could have been ascertained.

THE HESSIAN FLY—ITS RAVAGES.—*Facts and Reasonings for Consideration.*—In recently traversing the county of Oakland, we every where discovered traces of the ravages of this insect, the subtle enemy of the wheat crop. In most of the early sown fields, especially, the marks of its depredations were clearly visible, and in many of them the crop appeared to be destroyed beyond hope of recovery.

The farmers of Oakland, suffered the loss of their last year's crop, to a great extent, from the same cause, and as they look forward with serious apprehension to a recurrence of the calamity another season, many of them, are greatly discouraged, and the inquiry goes round, "What *shall* we do? What *can* we do?" The general conclusion is, that nothing can be done, and that the farmer may as well set his heart at rest on the subject. "For more than seventy years," says one, "has this insect preyed upon the land and no remedy has been found, and it is preposterous to suppose, that we, at this late day, shall discover one." "The insect," says another, "is so nearly of the same nature with the plant on which it feeds, that you cannot destroy the one without destroying the other."

But there are intelligent and enterprising farmers in that county who do not thus fold their arms in despair. Doctor Wilson, of West Bloomfield, a very scientific farmer, (as well as skilful physician,) informed us, that he sowed plaster on a field of wheat which had turned yellow, and appeared to be dying, apparently from the ravages of the insect, and the consequence was, that it revived at once, changed color, and grew vigorously. A heavy crop crowned the experiment. Land sandy. Mr. Cruice, an intelligent gentleman from Ireland, who has a delightful location upon the margin of Orchard Lake, made a similar experiment. His wheat, he remarked, when the plaster was applied, presented quite as hopeless a prospect of a crop as that of his neighbors which they plowed up. He had a yield of ten bushels to the acre. Had the plaster been seasonably applied, he would probably have had a full crop. Both these experiments, as we understand the matter, were made upon the last crop. The year previous Mr. Cruice had a field of wheat which exhibited similar symptoms of decline, and appeared to be in a dying state. He sowed two barrels of plaster on twelve acres out of fifteen. The part plastered grew astonishingly, and the fifteen acres produced a yield of 330 bushels, making an average of twenty-two bushels to the acre, the part plastered yielding about twice as much per acre as the part left unplastered. In both the last mentioned cases the land was rather sandy.

Another farmer said to us, that he believed he had at last found a remedy for the insect, as his wheat though sown early, had entirely escaped its ravages, while that of his neighbors around him, was apparently destroyed.—The secret of his exemption, as he supposed, was, that he had sown his wheat upon turf land.

A *general* fact, which every where obtruded itself upon the observation was, the lighter the soil the more devastating were the ravages of the destroyer. It is true, that in some portions of the county, naturally of superior fertility, the insect has made fearful inroads upon the wheat crop. But they are portions which have been under cultivation for a series of years, and have been continually, though imperceptibly it may be, undergoing a process of deterioration, so that doubtless certain ingredients of the soil, which are essential to the healthful growth of the plant, have been so far exhausted as no longer to retain their due proportions.

It is a common remark among farmers, that the *first* crop of wheat, well put in, upon a soil naturally fertile, is in little danger from insects. They may invade it, and frequently do, but we have yet to learn the instance, in which they have materially injured it. There may be, and doubtless are, soils originally light, and even those which are naturally fertile, but badly prepared, on which the first crop even, would not be secure.

And what is the conclusion to which we are conducted, in the light of these facts? Can it be mistaken? We would not rely, with overweening confidence, upon a single isolated fact, sustained by a single experiment, perhaps imperfectly made, and under circumstances which, from their peculiarity, prove nothing as to the practicability of its universal application. But when there are different classes of facts, well ascertained, and general in their application, all pointing to the same conclusion, then we may speak in more decided tones. Nor are we to discard a conclusion, merely because some one or more of the facts adduced in its support, are proved to be groundless, *provided* there are other facts well attested, and uninvalidated, sufficient, of themselves, to establish it.

What then, we ask again, is the conclusion to be arrived at, from a careful consideration of the above facts? Is it not—and is there any escape from the inference—that the disasters to the wheat crop from this cause, are to be ascribed mainly to bad husbandry? How are we to account for the effect of plaster, in the cases mentioned above, if not upon the principle, that the soil was deficient in certain qualities necessary to sustain the plant and make it *insect-proof*, and that this deficiency was supplied by the application of plaster? And does not the favored exemption of wheat sown upon turf land, in the instance above mentioned, seem to show, that the soil, having enjoyed an opportunity to replenish its resources, had regained its deficient qualities, in due proportion? And if it be a general fact that the wheat crop is exposed to injury from this cause in proportion to the lightness or exhaustion of the soil, while upon the original, virgin soil of the country, of good quality, it is endued with a constitutional vigor which secures it against material injury, then does it not follow, that the true remedy for the evil is to be sought *in the improvement of the soil*—in bringing it up to the standard of healthy production, established by the great author of nature?

Nor is there any thing in the *history* of this insect to impair the validity of our argument—but on the other hand, our position gathers strength from this very quarter. A communication published in Carey's Museum, dated Hunterdon, New Jersey, January 1st, 1787, proposes as a remedy, "sowing on *rich land*." Another communication appeared in the same publication, dated, Prospect Hill, Delaware, June 12, 1792, which states, that the wheat crop in that region, had been entirely destroyed, "except what was growing *upon a rich soil*." And Dr. Fitch, in his celebrated essay upon the Hessian Fly, published a few months since, and with which the readers of the Farmer, have been made acquainted, remarks, that "a striking contrast may often be perceived in different parts of the same field, the summits of knolls and ridges, situations where the soil is most meagre almost invariably showing the greatest amount of damage, whilst the intervening hollows, to which fertilizing matters are washed from the surrounding acclivities, sustain a comparatively slight, if at all sensible injury; yet, he continues, the latter situations are the very ones, which insects of this family are known to be most prone to frequent, being more low, shady, and damp!! He adds, that "the farmers themselves, in districts where the fly has prevailed, have all learned from experience, that it is only upon fertile lands, that it will do to sow their wheat."

Is it not sufficiently manifest, then, that the farmer would find an almost certain remedy for this evil in the improvement of the soil—and that by neglecting to improve his light lands, and suffering those which were originally fertile, to run down, he is effectually preparing the way for the destruction of his hopes—to say nothing of the bad policy of such management, even if such a consequence were not to be apprehended?

This consequence, however, would seem to be the penalty affixed to the over-tasking rapacity of man. And happy will it be for our farmers, if they are thus *scourged* into a better system of husbandry. Then will the lessons which they have been so slow to learn, be turned to profitable account, and the very cause which threatened the destruction of their hopes, be made available to their permanent prosperity, and thus will their dear-bought experience be made to yield them a golden harvest.

Do you say, that all this looks well—excellent—and that you will speedily set yourself to the task of reform, but that you despair of living to see it accomplished, unless you can have present relief? But do you not see, that the facts adduced, while they go to establish the above position, place within your reach at the same time, the very relief you ask? The lighter soils on which the wheat crop is most liable to injury from this cause, are the very ones on which plaster produces its happiest effects. As a temporary expedient, it will undoubtedly be found to be, to a considerable degree, efficacious, in averting the calamity, *provided* it be applied in a moist time, and the season which follows be not exclusively dry, requiring as it does 400 parts of rain-water to one of its own weight for solution. Its beneficial effects extend to all kinds of soils, except stiff clays, and even to those if applied in conjunction with lime.—*Michigan Farmer.*

APPLE ORCHARDS.—The following article on the constituents of the apple tree deserves the special attention of orchardists. They will see therein the reason why ashes and lime have so often (indeed as often as they have been applied) proved beneficial to apple orchards. Lime and potash enter largely into the composition of the apple tree, and these and other earths, in a series of years, become deficient, and from this deficiency, and for want of other manures and perhaps of cultivation, the tree is stunted—ceases to put forth vigorous rootlets and leaves whereby nutriment is imbibed. Well rotted stable manure, combined with lime, ashes, and bones, will, together with cultivation and cautious pruning, restore any declining apple orchard as surely as judicious treatment will restore the strength of an overworked and half-starved horse:—*Louisville Journal.*

"*The Distribution of the Inorganic Matter in Vegetables.*"—Under the above heading the American Journal of Agriculture and Science for April contains a paper of 29 pages, which gives the results of a vast amount of analytical research. Prof. Emmons has been some years in the employ of the State in connection with its voluminous and original work, embracing the whole range of the natural history of New York. That part of this very expensive undertaking which relates to agriculture and rural economy will be of incalculable value for the many new facts developed, showing the mineral food of our fruit and forest trees, as well as annual and biennial plants. Let us first consider the ash of the apple-tree:

	Sap-Wood.	*Heart-wood.*
Potash	16.19	6.620
Soda	3.11	7.935
Chloride of sodium	0.42	0.210
Sulphate of lime	0.05	0.526
Phosphate of peroxide iron	0.80	0.500
Phosphate of lime	17.50	5.210
Phosphate of magnesia	0.20	0.190
Carbonic acid	29.10	36.275
Lime	18.63	37.019
Magnesia	8.40	6.900
Silica	0.85	0.400
Soluble silica	0.80	0.300
Organic matter	4.60	2.450
	100.65	98.535

	Bark of Trunk.
Potash	4.930
Soda	3.285
Chloride of sodium	0.540
Sulphate of lime	0.637
Phosphate of peroxide iron	0.375
Phosphate of lime	2.425
Phosphate of magnesia	
Carbonic acid	44.830
Lime	51.578
Magnesia	0.150
Silica	0.200
Soluble silica	0.400
Organic matter	2.100
	109.450

On studying the composition of the ash of the bark of the apple-tree, we are forcibly struck with the fact that 109½ parts contain over 96 parts of lime and carbonic acid. In other words, a very large share of the earthy elements taken from the soil and stored in the bark of an apple tree is nothing but common lime-stone. The importance of *lime* in the organization of smooth healthy bark, and the vigorous growth of an orchard, can be inferred with the utmost certainty. There are other minerals in the ash of the bark of the apple-tree that should not be overlooked. But as we are pressed for room, we must pass to the

ingredients found in the ash of the sap and heart wood.

We ask particular attention to the facts, that the sap-wood contains 17¼ parts of bone earth, (phosphate of lime,) while the heart-wood has only 5¼ per cent. of that mineral. It has long been known that the seeds and fruit of plants and trees contain a much larger quantity of phosphates in their ash, than is found in the ash of their trunks or stems. But, if we mistake not, to Prof. Emmons belongs the honor of being the first to discover the curious law in vegetable physiology that the *sap-wood*, through which all the fluids pass from the roots to the seeds and fruit in the top of the tree, contains more of the phosphates than either the heart-wood or bark of a tree. If nature is prolific in the production of seed to perpetuate the race, and exceedingly careful in protecting the germs of the next generation, she is at no less pains to store up *phosphates* along the surfaces of the ascending tubs of vessels, to be borne upwards with the sap, when needed, to organise the embryo of each living being.

By carrying the fruit of an orchard out of it every year, is it not plain that whatever amount of bone-earth, alkalies, sulphur, iron, &c., is taken away from the soil in the crop, should be restored to it again in some available form? How few fruit-growers duly appreciate this cardinal principle.

FLORICULTURAL.

WORK FOR APRIL.

Prepared for the American Farmer, by S. Feast, Florist.

The Flower Garden will now require particular attention—dig the borders; rake and roll the grass plants; plant and trim the shrubberry; clean and roll the gravel walks, and make all ready for the sowing of seeds of *Hardy Annuals*, &c. for blooming during summer, and remember an hour's work now is worth a day in summer.

Towards the latter end of the month if the weather be mild, Verbenas, Stocks, Roses, and other half hardy plants may be transplanted to the flower garden—in the meantime give them plenty of air, and water whenever the soil appears dry.

Jacobean Lilies, Tuberoses, Gladioluses, and *Summer Flowering Bulbs* may now be planted.

Tulips, Hyacinths, and other spring flowering bulbs should be uncovered as soon as possible.

Hardy Annuals.—Attend to the directions given of these last month. There are many kinds that require to be sown where they are intended to remain—such as, *Mignonette, Dwarf Rocket Larkspar, Poppies, Sweet Peas, Convolculus Minor, Nolanas, Flos Adonis*, &c.—a list of which may be got from any experienced seedsman.

Paonies and other hardy *herbaceous plants*, may be transplanted with success.

Dahlias, (if wanted for early bloom) should be attended to as directed last month.

IN THE PARLOUR OR GREEN HOUSE.

Azaleas will be blooming, and should have plenty of water as soon as the bloom is over, repot such as require it.

Pelargoniums.—Give these plenty of water and air, and when in bloom shade them from the scorching rays of the sun.

Camellia Japonicas will now be advancing rapidly in growth, and should be copiously supplied with water.—Attend to syringing frequently.

Cactuses.—The flower bulbs of these will now be pushing rapidly, and will require watering as often as the soil becomes dry.

Fumigation.—If any of the plants are infested with the green fly, by placing them in a small close room, and burning a small quantity of tobacco stems therein, in 3 or 4 hours the insects will be entirely killed. Be careful not to let the tobacco blaze, as it will be apt to injure the plants.

BALTIMORE MARKET—MARCH 23.

Flour, Howard-st $5,87, but we hear of no sales—City Mills $6,12, but we hear of no sales—*Wheat*, Va. and Md. reds, 135 a138c.; lots by wagons sell at 128a131—*Corn*, some sales of white are made at 44a46c. and yellow 48a49c.—*Oats* 36a38, for Md. and 40c. for Va.—Mess *Pork*, $10,25; prime 8.75a9—*Bacon*, 4 1-4a4½ for shoulders and 5c. for sides; hams 7a9c.—*Lard*, in kegs, 7 3-4, some small lots at 8c.—*Butter*, western, is scarce what has arrived was taken at 14a15c. for good lots; glade —*Whiskey*, small sales of bbls. at 24; hhds. 23½—*Cattle*, head offered on Tuesday, of which 230 were sold to butchers and 456 driven to Philadelphia; prices ranged from 3a3.75 pe 100 lbs on the hoof, equal to 6a6,25 net, and averaging 337 gros —*Hogs*, sales of live at $6a6.25—*Coffee*, Rio, 7 1-8a7 3-4; La guayra 7¼c.—Cotton, La 8 3-4; Upland 8¼a8 5-8—*Wood*, hick ory 4.50a5; oak 3,75a4; pine 2,50a3—*Hay*, $16 per ton from wagons, and 85a90c. per hundred—*Molasses*, N. O. 25a26c.— Cuba 18a33c.—*Turpentine*, spirits, 45a46; tar 2,12, rosin 1a1.3 —Plaster 3.50a3.75 per ton—*Potatoes*, scarce and in demand sales of mercer at $1,25 per bushel—*Rice*, 3,75a4 per 100 lbs.— *Sugars*, P. Rico, 4,50a5,20; Cuba 4.05a4.10, N. O. 3.90a4.50— *Wool*, little doing, some small sales at 28a30—*Tobacco*, receipts continue light, and but little change in prices, Md. $3 for in ferior and com.; $3a7.50 for good common; 5a9 for good 6a8 for fine and better qualities; Ohio, com. 2,25a2,50; good do 2,7 a3, reds 4a10; fine wrappery red 13a20; spangled 4a10; yellow a12.

METEOROLOGICAL TABLE,

From the 20th of February to the 21st of March.

Kept at Schellman Hall, near Sykesville, Carroll county

Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock.

	Wind.			Temperature			Remarks.
21	NW	W	SE	40	54	48	Clear Cloudy
22	SE	SE	SE	38	37	37	Rain 3-4in.
23	W	W	W	34	51	44	Fog Clear
24	SE	SE	SW	34	39	34	Cloudy Clear
25	W	SE	SE	26	35	32	Cloudy Clear
26	W	SW	SW	23	38	35	Clear
27	N	NW	NW	28	43	38	do
28	NW	SW	SW	24	45	47	do
29	SW	W	W	38	40	33	do
1	SW	SW	SW	25	34	28	Clear Cloudy
2	SW	NE	NE	19	19	17	Cloudy Snow 6 i
3	SW	SW	SW	24	44	36	Cloudy Clear
4	NW	NW	NW	14	32	28	Clear
5	NW	NW	NW	27	28	22	Clear
6	NW	NW	NW	14	42	39	Clear
7	SW	SW	SW	33	50	40	Clear
8	W	SW	SW	37	62	60	Hazy Atmosphere
9	N	N	N	45	41	37	Rain Rain 3-4 inch
10	W	W	W	35	44	34	Cloudy Clear
11	NW	NW	NW	22	41	37	Clear
12	W	SW	SW	33	59	52	Clear Cloudy Rain
13	W	W	W	40	47	33	Clear
14	W	W	NW	24	27	22	Clear
15	NW	NW	NW	14	24	18	Clear Cloudy
16	NW	W	W	15	30	27	do
17	NW	NW	NW	23	34	29	do
18	E	E	E	23	30	29	Cloudy Hail Sleet
19	SW	NE	S	31	35	36	Cloudy Rain Fog
20	NW	SE	S	33	43	45	Cloudy Shower

TO THE MECHANICS, MANUFACTURERS, ARTIST AND OTHERS IN THE UNITED STATES.—T Board of Managers of the *Maryland Institute for the promoti of the Mechanic Arts*, recently established in the city of Balt more, respectfully announce that they intend holding their fir FAIR for the exhibition of improved Machinery, Agricultur Implements, &c. in the month of October next.

Further particulars will be given in future advertisemen and circulars will be forwarded to persons engaged in ma factures and the arts.

J. K. STAPLETON,
GEO. J. ROCHE,
EDWARD NEEDLES, } Com. on Fai
ROSS WINANS,
B. S. BENSON,

ADAM DENMEAD, Chairman

SAM'L. SANDS, Sec'y. Ap. 1

TO FARMERS AND PLANTERS.

A. D. CHILDS' PATENT HORSE-POWE

PRICE $110—or without the wood work of the sweeps $1

The subscriber would invite his patrons and the public g erally to call and examine this Horse Power for themsel and also his Threshing Machines, as he has several on h of supesior workmanship. He has also on hand a quantity Ploughs of all sizes and various patterns and well made, a great variety of other Implements, such as Wheat Fans, rows; Swingle-trees, Corn Shellers, Oorn and Cob Cr &c. &c., which he will sell very low, as he wishes to cl his old stock, which he has been several years reducing

Cylindrical Straw Cutters and Plough Castings on Wholesale & Retail as heretofore. J. S. EASTMAN

In the rear of his old Store, No. 180 PRATT STREET, HANOVER-ST. Entrance by alley through the Front Store Sep 1

PREMIUM PLOUGHS AND FARMING IMPLEMENTS.

THE Agricultural Exhibitions at Easton, Talbot Co., Md. 10th and 11th Nov. 1848, was the most extensive exhibition ever had South of the State of New York. Among the ploughs exhibited was the Davis; Beach; Wiley; Woodcock; Chenoweth; Winan; Drury's; Sinclair's Maryland self-sharpner; and a variety of others, making more than 60 ploughs on the ground for exhibition, and every variety of Straw Cutter; Wheat Thrasher and Separator; Fodder Cutter; Corn and Cob Crusher; Gang Plough; Ox Yoke; Grain Cradle and Cultivator, sold in this city; and after two days close investigation by the committee the highest premiums were awarded on the above articles as follows:

To E. Whitman, jr. for the best 2 horse Plough, Prouty & Mears, No. 3½.
To E. Whitman, jr. for the best Straw Cutter, Ruggles, Nourse & Mason.
To E. Whitman, jr. for the best Fodder Cutter, Royer's Im.
To E. Whitman, jr. for the best Grain Cradle, Grant's.
To E. Whitman, jr. for the best Wheat Thrasher and Separator, Whitman's patent
To E. Whitman, jr, for the best Gang Plough, Whitman's pattern
To E. Whitman, jr. for the best Ox Yoke, Whitman's Yankee pattern.
To E. Whitman, jr. for the best Cultivator, Whitman's do
At same Fair last year the highest premium was awarded to
To E. Whitman, jr. for the best Flushing Plough, (Prouty & Mears' No. 5 1-2)
To E. Whitman, jr., the best Seeding Plough, (Prouty and Mears' No. 2 1-2)
To E. Whitman, jr. for the best Subsoil Plough, (Prouty & Mears' No. 2 1-2)
To E. Whitman, jr. for the best Corn Sheller, Whitman's pattern.
To E. Whitman, jr. for the best Wheat Fan, Grant's
To E. Whitman, jr. for the best Straw Cutter, Hovey's
To E. Whitman, jr. for the best Harrows.

None of which were offered for premium this year.

At the Montgomery County Fair this season, we also received $20 for the best display of implements, and the first premium on two horse Plough; Corn Sheller and Wheat Fan. All the above and a greater variety of new and improved implements, for sale by the subscriber than is found in any establishment of the kind in the United States.

E. WHITMAN, jr.
a1 N. E. corner of Light and Pratt-sts., Baltimore.

LIME—LIME—The subscriber is prepared to furnish from his depot at the City Block, Baltimore, ALUM STONE LIME of the purest description, deliverable at any point on the Chesapeake Bay or its tributaries, at such prices as cannot fail to please.

He is also prepared to furnish superior building Lime at 25c. per bushel, in hhds., or at $1 per bbl. E. J. COOPER,
jy 1 City Block, Baltimore.

SEEDS! SEEDS!—A general assortment of GARDEN SEEDS are just received from the best Seedsmau in this country, and can be recommended Fresh and Pure.

E. WHITMAN, JR.
Corner of Light and Pratt streets, Baltimore.

FOR SALE—THE Minor and Horton PLOWS of every size, with all their extra Castings.—Also, Wiley and all other PLOWS and CASTINGS, all of the Northern manufacture and materials. We also keep one of the best hand Corn Shellers in this market, which we will warrant to all who purchase. We have a lot of large size 2 and 3 horse Plows of the Wiley and Minor & Horton, which we wish to get off and will sell them very Cheap, at W. GAWTHROP & SON'S,
mh 1 1848. No. 71 Bowly's wharf, Baltimore.

The "Simon pure," and invincible WILEY PLOW still in the field—A. G. MOTT, at No. 38 ENSOR STREET, near the *Bel-Air Market*—Manufacturer and Vender of Implements of Husbandry, viz. *Plows, Harrows, Cultivators, Grain-Cradles, Wheat-Fans, Corn-Shellers, Straw-Cutters*, Endless chain *Horse Powers, Threshing Machines, &c. &c.*—through this medium, would apprize the agricultural community of the fact, that he is the only manufacturer in the "Monumental city" of the GENUINE WILEY PLOW (right and left hand,

CORN AND COB CRUSHERS—CORN SHELLERS, STRAW CUTTERS, &c.

WE are manufacturing and offer for sale the following valuable agricultural machinery, viz.

Our Eagle Corn shellers, made with single and double plates, price, $15 to 18
Virginia cylindrical corn sheller, $30
Box and vertical corn shellers, $10 to 18
Goldsborough horse power corn sheller, $40
Smith's Columbiad do do $55
Pettigrew's N. Carolina do do $80
Cylindrical Straw Cutters, with and without patent corn stalk Lacerators attached—prices as follows, viz:

Inch.	9 in.	11 in.	12½ in.	14 in.
Lacerators,	0	$6	$8	$10
Price,	$25	$36	$45	$55

☞Cutting machines without Lacerators are sold at 25, 28, 30, 37 and $45 each. Farmers having our cylindrical straw cutters can have the Lacerators attached at the above rates, with a small additional price for time, &c. consumed in adding the attachment. This addition is valuable and should be adopted by every farmer who wishes to economise.

Corn and Cob Crushers, an excellent and durable machine, price $30. Also on hand as usual a large and general assortment of Thrashing machines, Plows, Fanning and Corn Mills, Drill machines, Tools, Garden and Field Seeds, &c.

j1 R. SINCLAIR, Jr. & Co., 62 *Light-st.*

THE SUBSCRIBER takes pleasure in returning thanks to the many gentlemen who have favoured him with their MILL-WORK; also to the farmers and planters for their liberal support in the Machine line, and would respectfully inform them, that his endeavors to please will continue unremitting. He is prepared at all times to build any of the following kinds of MILLS. Overshot, Pitch Back, Breast, Undershot, Reacting, Steam, Wind, Tide, Horse-power, or Tread Mills; and having the best of workmen employed at pattern and machine making, he can at all times furnish the best articles at the lowest prices, such as Horsepowers, Pettigrew Shellers, Murray's Shellers, 4 kinds hand and power Shellers, portable Mills adapted to any power, Corn and Cob grinders, Straw, Hay and Fodder Cutters, Carry-log and Mill Screws; also manufactures Hoisting Machines, Hoisting Cranes, Pile Drivers Turning Lathes and Steam Engines; and any kind o Machine, Model or Mill-work built to order. Any kind of Castings and Smith-work at the lowest prices. I warrant all Mills planned and erected by me to operate well. JAS. MURRAY,
Millwright, York near Light st. Baltimore.

Also for sale, Jas. Murray's patent separating Shellers, which shells and puts the corn in perfect order at the same time, for the mill or for shipping—Persons living near the city can bring with them one or two barrels of corn, and give the sheller a fair trial before purchasing.

He has also for sale, the following second hand Machinery: 2 pair 4 ft 6 in. French burr Millstones, with all the gearing; 1 pair 3 ft 6 in. French Burr Millstones, with all the gearing; and some Saw Mill work—the whole are good, and any or all of the above will be sold low. n1

HALIFAX, N. C., August 25th, '47.

Mr. JAS. MURRAY,—*Dear Sir:*—This is to certify that I have used your fans during the last spring and summer, and feel no hesitation in saying they are the best by far, I ever saw, I fanned with one fan, one thousand barrels of corn in one day—and in one day fanned one thousand bushels of wheat, as it come from the thresher. They will do as much as any two I ever had, in the same time. Yours, &c.

W. B. HATHAWAY.

AN individual who has had considerable experience in management as a farmer and planter of Tobacco, and can give the most ample references, wishes to engage with some gentleman in Eastern or Middle Virginia, who has a large concern to attend to; such an one might find it much to his interest to make early application, by addressing the "*Editor of the American Farmer*," Postage paid. n1.

20,000 ISABELLA, CATAWBA & ALEXANDER GRAPE VINES, of suitable age and size for forming vineyards—For Sale in large or small quantities on the best terms. Purchasers of vines from the subscriber will receive free of charge, a Treatise (just ready for the press,) on the cultivation of American grape vines, and the manufacture of wines, treating particularly of soil, location, planting out, manuring, training and pruning—illustrated with plates.

Also a choice selection of *Apple, Pear, Peach, Plum, Cherry and Quince Trees.* Also a small number of *Dubois Early Golden Apricot Trees.* One tree of this remarkable variety produced a crop of fruit last season that sold for ninety dollars, in New York market. The fruit being of the earliest variety sold at twenty dollars per bushel. Apply to
mh3t B. G. BOSWELL, 230 Pine st., Philadelphia.

WANTED—An OVERSEER, to superintend a Farm, near this city. He must thoroughly understand his business, and produce recommendations as to character and qualifications, and none other need apply. A man with a small family, whose wife would engage to attend the dairy, would be preferred.
Apply to the Editor of the Farmer. Ap. 1.—1t.

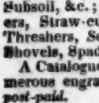
WM. R. STUART, COMMISSION MERCHANT, No. 14 Bowly's Wharf, respectfully solicits the patronage of the citizens of Maryland and elsewhere; and gives assurance that all business entrusted to his directions shall receive prompt attention. ap 1

FIELD AND GARDEN SEEDS.

A COMPLETE assortment of American Field and Garden Seeds, of all kinds, principally grown and put up expressly for us.
ALSO—English and French Grass and other Seeds, just received. Among these are the Perennial and Italian Ray Grass, Sweet Vernal and Oat Grass, fine mixed Lawn Grass, White Clover and Lucerne. Also, English Beans, Vetches, Ruta Baga Seed, &c. &c.
Agricultural and Horticultural Implements, a complete assortment.
The American Agriculturist, a monthly publication of 32 pages octavo, with numerous Illustrations, Edited by A. B. ALLEN.
New York Agricultural Warehouse and
Seed Store, 187 Water street, N. Y.
m1-2t. A. B. ALLEN & CO.

NEW YORK Agricultural Warehouse and SEED STORE.—The subscribers keep constantly on hand a large and complete assortment of Agricultural and Horticultural Implements, and Field and Garden seeds of all kinds.
Our implements embrace upwards of sixty different sizes and kinds of Plows, among which are the celebrated Ruggles, Nourse & Mason, Eagle, Centre-draft Self-sharpener, Sidehill, Cotton, Rice, Sugar-cane, Double Mold board, Trenching, Subsoil, &c.; also, Harrows, Rollers, Cultivators, Corn-shellers, Straw-cutters, Wheat and Corn Mills, Horse-powers, Threshers, Scythes, Cradles, Axes, Horse and Hand Rakes, Shovels, Spades, Hoes, Grafting Tools, &c.
A Catalogue of the above, of 100 pages, illustrated with numerous engravings, will be sent gratis to all who apply for it *post-paid*. A. B. ALLEN & Co.,
m1-2t. 187 Water st. N. Y.

GARDEN AND FLOWER SEEDS. Having received a fresh supply of seeds from England, with many varieties entirely new, and having no old seeds on hands, persons desirous of obtaining a good article may rely on their quality, and at a moderate price—besides having a large collection of Hothouse, Greenhouse and hardy plants, Fruit and Ornamental Trees, Shrubbery, Bulbous roots, &c.
Cut flowers for parties, and boquets put up in best style to order. Application for Gardeners.
JONH FEAST, Florist and Seedsman,
mh4t *Corner of Lexington and Pine streets, Baltimore.*



NOTICE.
CLAIRMONT NURSERY,
Near Baltimore, Md.
We again take pleasure in notifying our various customers and the public, that the time has nearly arrived for transplanting Trees, &c., and consider our stock of fruit trees superior to what they have ever been before both in quality and in quantity, as we have had an opportuty of testing their correctness from our standard Trees which are extensively bearing.—We deem it unnecessary to enumerate the various kinds of fruit and ornamental Trees, Shrubbery, Roses, Green House plants, Flower roots, &c. &c., suffice it to say our Nursery and Seed Garden occupies about 100 acres of the Farm, and our determination is to give satisfaction if possible, both in price and quality—printed Catalogues, giving our prices, wil be be sent gratis; where large quantities are wanted considerable discount will be made. Letters addressed to R. Sinclair, Jr. & Co., Light St., Baltimore, or the subscribers, Balto. Md. will meet with prompt attention.
Persons wishing to act as Agents will please let us hear from them. WM. CORSE,
Nov 1 Successor to Sinclair & Corse.

LIME.

THE subscribers are prepared to furnish Building and Agriculture Lime at the depot on the Back Basin, corner of Eden & Lancaster streets, which they will warrant to give satisfaction, it being burnt from pure Alum Lime Stone, equal to any found in the United States. Orders may be left with William Robinson, No. 15 Hollingworth st. near Pratt.
ml. FELL & ROBINSON, City Block.

FLOWER SEEDS.

SAMUEL FEAST, keeps constantly on hand, a numerous collection of Flower Seeds; comprising some of the choicest kinds, now in cultivation, which he will be pleased to furnish to Amateurs, at moderate rates, at his Exotic Nursery and Seed Store, N. E. corner of Charles and Saratoga Streets, Baltimore, Md. ap 1

GARDEN SEEDS.

Warranted Fresh and Genuine, for sale by
SAM'L FEAST, Exotic Nursery & Seedsman,
N E corner of Charles and Saratoga-streets,
Ap. 1 Baltimore, M

BONE-DUST AND POUDRETTE.

THE subscribers are prepared to furnish the above named articles of manure, at the shortest notice, at their manufactory on Harris' Creek, Canton, near the Eastern limits of the city. Orders may be left at S. SANDS, Publisher of the American Farmer, No. 2 Jarvis' Building, North-st., Balto.
mar 1. HOSKINS & BAYNES.

AGRICULTURAL IMPLEMENTS—LABOR SAVING MACHINERY.—*GEORGE PAGE*, Machinist & Manufacturer, Baltimore st. West of Schroeder st. Baltimore, is now prepared to supply Agriculturists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in his line. He can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from $85 to $200, and each simple, strong and powerful. His *Horse Power & Thrashing Machine*, he is prepared to supply at the low price of $125 complete; the Thrashing Machines without the horse power, according to size, at $30, 40, 65 and $75; Improved Seed and Corn Planter, portable Tobacco Press; Portable Grist Mills complete, $12.

100 WHITMAN'S PREMIUM CORN SHELLERS, for sale, price $10, $16, and $18.
E. WHITMAN, JR.
j.1 N. E. Corner of Ligh t & Pratt-sts.—Baltimore.

PLOUGHS! PLOUGHS!!

The subscriber is manufacturing Ploughs of various patterns and of different sizes; also Wheat Fans, Cylindrical Straw Cutters, Corn and Tobacco Cultivators, CORN SHELLERS, &c. Also, THRESHING MACHINES and HORSE POWERS—these latter are used by the following gentlemen, to whom reference is made, as to their superior value, viz. Messrs. T. Beard, Th. Beard, Dr. Watkins, J. T. Hodges, T. Welsh, W. Mackall, J. Iglehart, A. Sellman, R. Sellman, W. Hopkins, J. Kent, Geo. Wells, Geo. Gale, Dr. Fenwick, A. Franklin, J. C. Weems, of Anne Arundel county; G. W. Weems, J. T. Barber, R. B. Chew, W. Boswell, Y. Howes, of Calvert co. Md. ☞Agent of Evans Davis, Baltimore co. for sale of the Woodcock Plow.
Pennsylvania Grain Cradles. CHAS. H. DRURY,
Gillingham alley, entrance from Howard st. near Pratt,
mal and store, Hollingsworth st. corner Prat.

WHITMAN'S AGRICULTURAL WAREHOUSE is now filled with the largest and best selected Stock of FARMING IMPLEMENTS ever offered in the United States. His Premium Prouty & Mear Ploughs and his Premium Cultivator and Gang Ploughs are decidedly the best in use. All who are in want of the best and most approved Implements will do well to give him a call. E. WHITMAN, JR.
mar. 1 Corner of Light and Pratt streets, Baltimore.

CONTENTS OF THE APRIL NO.

Work on the Farm	305	Complimentary	322
Root Culture	308	Charles county Ag. Soc'y	323
R. J. on Manures	309	Work in Garden for April	323
R. N. Milburne, on the use of Ashes	313	The Eastern Shore of Md.	324
Jas. Gowan on Farming and Agricultural Education	315	Preparation of Bones for Manures	325
'Patuxent Planter' on the Feb. No. Am. Farmer	317	Col. Ware's Cotswold	326
B. E. S. on the failure of Fruit Trees	319	Apple without core or seeds	327
Harvesting Clover Seed	319	Guano, in Peru	327
Notices to Correspondents	320	Farmer's Library, &c.	329
Do of Cole's Veterenarian—of Buist's work on Gardening	320	Multicole Rye, &c.	330
Do of Knight's Washington's Agricultural correspondence	321	T. E. Blount, on Swine	330
Do of Farming in Caroline county	321	'A Farmer' on the Potato Rot	331
Agricultural Products of Ohio	322	Composts for corn	331
		March Snow	331
		The Hessian Fly	332
		Constituents of the apple Tree	333
		Markets, Meteorological Table, &c.	334